Research Product 99-08

Tacit Knowledge for Military Leaders: Company Commander Questionnaire

March 1999

Fort Leavenworth Research Unit

U.S. Army Research Institute for the Behavioral and Social Sciences

U.S. Army Research Institute
for the Behavioral and Social Sciences

A Directorate of the U.S. Total Army Personnel Command

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Research accomplished under contract
for the Department of the Army

Yale University

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REPORT DOCUMENTATION PAGE

1. REPORT DATE (dd-mm-yy)	2. REPORT TYPE	3. DATES COVERED (from. . . to)
March 1999	Interim	October 1993 – September 1998

4. TITLE AND SUBTITLE	5a. CONTRACT OR GRANT NUMBER
Tacit Knowledge for Military Leaders: Company Commander Questionnaire	MDA903-92-K-0125
	5b. PROGRAM ELEMENT NUMBER 0602785A
6. AUTHOR(S) Jennifer Hedlund (Yale University); Wendy M. Williams (Cornell University); Joseph A. Horvath (IBM Consulting Goup); George B. Forsythe & Scott Snook (USMA); John Wattendorf (IBM); Jeffrey A. McNally (USA); Patrick J. Sweeney (USA); Richard C. Bullis (Center for Army Leadership); Martin Dennis & Robert J. Sternberg (Yale University)	5c. PROJECT NUMBER A790
	5d. TASK NUMBER 1111
	5e. WORK UNIT NUMBER C03
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Yale University Department of Psychology P.O. Box 208205 New Haven, CT 06520-8205	8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES) U.S. Army Research Institute for the Behavioral and Social Sciences 5001 Eisenhower Avenue Alexandria, VA 22333-5600	10. MONITOR ACRONYM ARI
	11. MONITOR REPORT NUMBER Research Product 99-08

12. DISTRIBUTION/AVAILABILITY STATEMENT

Approved for public release; distribution is unlimited.

13. SUPPLEMENTARY NOTES

CORs: Trueman Tremble & Rex Michel

14. ABSTRACT *(Maximum 200 words)*:

Tacit knowledge is defined as knowledge grounded in experience, intimately related to action, and not well supported by formal training and doctrine. Tacit knowledge of leadership used by Army officers at three different levels of command have been identified, assessed, and developed into assessment questionnaires for each level. The questionnaires have been construct validated and proven to predict certain leadership effectiveness ratings at each level and to do so better than measures of verbal reasoning ability, tacit knowledge for business managers, or experience. This product contains the leadership tacit knowledge questionnaire for company commanders. Instructions are given for administering and scoring the questionnaire and recommended applications are described. The document begins with a brief summary of the development and validation of the questionnaire.

15. SUBJECT TERMS

Tacit knowledge Leadership knowledge Leadership Leader effectiveness Leader training

SECURITY CLASSIFICATION OF			19. LIMITATION OF ABSTRACT	20. NUMBER OF PAGES	21. RESPONSIBLE PERSON (Name and Telephone Number)
16. REPORT	17. ABSTRACT	18. THIS PAGE			
Unclassified	Unclassified	Unclassified	Unlimited	102	Rex R. Michel DSN 552-9790

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March 1999

Army Project Number
2O262785A790

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FOREWORD

A primary mission of the U.S. Army Research Institute for the Behavioral and Social Sciences (ARI) is to enhance military readiness through programmatic research that supports the effective performance of Army leaders. To accomplish this, ARI and the United States Military Academy (USMA) established the Center for Army Leadership and Organizational Research (CLOR) at USMA to conduct research as part of ARI's research program in the areas of organizational leadership and leader development, education and training. This product is part of the ARI exploratory development research program formulated and undertaken by the CLOR.

The project which produced this product was jointly undertaken by researchers at USMA and at Yale University. The overall objective of the project was to test the applicability of a theory of tacit knowledge to military leadership. Previous research had shown that tacit knowledge acquired through practical on-the-job experiences, is related to executive and managerial effectiveness in civilian organizations.

The rigorous methodology used in identifying and assessing tacit leadership knowledge has produced tacit knowledge inventories applying to platoon, company and battalion levels of command. This product is the Company Commanders Tacit Knowledge Questionnaire. Although further testing and standardization would be required to make this a formal assessment instrument, the methods used to derive the questionnaire make it a valuable tool for teaching, group discussion, and self-assessment and training.

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TACIT KNOWLEDGE FOR MILITARY LEADERS: COMPANY COMMANDER QUESTIONNAIRE

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TACIT KNOWLEDGE FOR MILITARY LEADERS: COMPANY COMMANDER QUESTIONNAIRE

Introduction

The Tacit Knowledge in Military Leadership project is a collaborate effort between researchers at Yale University, the U.S. Military Academy, and the U.S. Army Research Institute to discover what successful leaders know about how to lead and to use this insight to recommend ways to develop effective leaders. According to Army doctrine (DA Pam 350-58), leader development is based on three pillars: 1) institutional training (formal schooling), 2) self-development, and 3) operational assignments. All three pillars are viewed as important to leadership development, yet relatively little is known about the role of operational assignments relative to institutional training. While most practitioners tell us that Army leaders learn about leading while doing real work in the motor pool, in the field, and in the barracks, there has been little effort to understand how this actually happens -- how Army leaders develop "as leaders" while on the job. This interest in understanding how leaders learn about leading while on the job led to the work on tacit knowledge by Robert Sternberg. The tacit knowledge work offered a framework for studying leader development through operational assignments.

A large body of research has shown that learning from work experience has an implicit or "behind the scenes" quality and that much of the knowledge acquired in this way is of a hidden or "tacit" nature. Tacit knowledge is defined as work-related knowledge that is action-oriented, practically relevant, and generally acquired on one's own. By action-oriented, we mean that tacit knowledge takes the form of "knowing how" rather than "knowing that." Practical relevance refers to the value of the knowledge in supporting personal goals. And acquired on one's own means that the environment (i.e., other people or media) does not necessarily support the attainment of such knowledge. Knowledge with these properties has been shown to be predictive of success in a variety of professional domains (Sternberg et al., 1995). We expected that these "lessons from experience" would be important to successful military leadership and therefore implemented a long-term project to study the tacit knowledge of military leaders.

The goals of the Tacit Knowledge in Military Leadership project have been: (1) to identify the tacit knowledge of effective military leaders, (2) to construct inventories to measure the possession of tacit knowledge, (3) to validate these measures against indicators of leadership effectiveness, and (4) to recommend ways to apply the products and insights from the tacit knowledge work to leader development. The results of this work can be found in several reports referenced in the current document (Hedlund et al., 1998; Horvath, Forsythe, et al., 1994; Horvath, Williams, et al., 1994; Horvath et al., 1996, 1998). One of the products generated from this work is a set of inventories developed to measure the tacit knowledge of current leaders. Inventories were produced for three levels in the chain-of-command: platoon leaders, company commanders, and battalion commanders. This document presents and describes the Tacit Knowledge for Military Leaders: Company Commander Questionnaire. We briefly explain the development of the Company Commander Questionnaire (CCQ) and summarize evidence that

supports the relevance of tacit knowledge to leadership effectiveness. We also make recommendations as to some potential uses of the inventory in Army leadership development.

Inventory Development

The development of the Tacit Knowledge for Military Leaders: Company Commander Questionnaire involved several steps. First, we identified the experience-based knowledge of Army officers by reviewing the military practice literature and interviewing company commanders. Second, we compiled the stories and advice obtained from the interviews and judged each story according to how well it fit our definition of tacit knowledge. Third, we asked incumbent officers to rate the quality of simplified versions of these stories. These ratings were used to select the most promising items for use in developing a measure of tacit knowledge. Finally, for those items selected, we expanded the simplified form of the items into a more detailed problem scenario accompanied by a set of possible responses which created a complete tacit knowledge question. We elaborate upon each of these steps below.

Identification of Tacit Knowledge

In the first phase of the inventory development, we conducted a systematic review of Army trade publications to obtain preliminary insight into the experience-based, tacit knowledge of Army leaders (see Horvath, Williams, et al., 1994). This review was followed by a series of interviews with 32 company commanders to acquire concrete examples of what these leaders have learned on their jobs (see Horvath, Forsythe, et al., 1994). These interviews produced a body of knowledge in the form of interview transcripts and summaries. During the interviews, we asked officers to "tell a story" about a personal experience from which they learned something important about leadership at the company level. Interviewers and interviewees worked together to clarify and capture the important features of these experiences. From the transcripts of these interviews we compiled a set of story summaries which formed the basis for tacit-knowledge inventory questions.

Next, we asked a panel of military experts to reach agreement on whether or not each story summary met our criteria as tacit. These experts were three senior members of the research team (two colonels and one lieutenant colonel) from the Department of Behavioral Sciences and Leadership at the U.S. Military Academy who had 72 years of military experience combined. Knowledge was considered tacit if it was: (1) acquired through personal experience, (2) intimately related to action, (3) not well supported by formal training or doctrine, and (4) pertained to leadership rather than technical performance. Stories that met these criteria were rewritten into a simplified, standard format using a series of "if-then" statements. An example of this format for a story from a company commander is shown below in Table 1. After narrowing down the set of stories, we asked members of the expert panel to sort the remaining knowledge items into categories of their own devising. This sorting produced content-based categories of tacit knowledge that provided early insight into developmental challenges at the company level. These categories (see Table 2), which we refer to again in a later discussion, were also used to select representative items for inclusion in the tacit knowledge inventory.

Table 1.
Sample Leadership Story and Summarized Tacit Knowledge Item

Leadership story: Integrating Civilian and Military Personnel in the Unit

In my company, we had no E5 sergeants. I had civilians doing supervisory jobs with soldiers under them. In this type of unit there are potential cohesion problems. Civilians see soldiers take off for training and wonder why they have to keep working. Soldiers see civilians get cash awards for good performance and wonder why they can't have similar awards. To deal with some potential problems, I had some civilian and military members of the unit draw a poster of our organization (organizational chart) and post it in the mail room. This way, everyone could see where they fit in the organization. I also formed a morale committee composed of military and civilian personnel to plan company social functions. We had pot lucks, parties, and dining outs. To deal with potential misperceptions of how hard people were working, I created a sign-out roster. People had to sign-out when they left their place of duty. Others should see that they were working someplace else, and not just taking time off.

Coded tacit knowledge item: How to build a team made up of both military and civilian personnel.

IF you are a commander of a unit that has both military and civilian personnel
AND
IF you are having problems with perceptions of unfairness in allocation of work load and awards between civilian and military personnel,
THEN use a sign-out sheet to make visible each member's location during the day,
BECAUSE the sign-out sheet communicates information about each member's whereabouts during the duty day and this may prevent misunderstandings about work allocation.

Table 2.
Categories of Tacit Knowledge for Company Commanders

Category	CCQ questions
Taking care of soldiers	C1
Directing and supervising subordinates	C2, C16
Cooperating with others	C3, C6
Establishing trust	C4, C8
Managing self	C5, C19
Communicating	C11, C12
Motivating subordinates	C9, C10, C14
Developing subordinates	C7, C13
Balancing mission and troops	C15, C18
Influencing the boss	C17

Item Selection

In the next phase of inventory development, we sought to identify tacit knowledge items that were most promising for inclusion in the actual inventory (see Horvath et al., 1996). We compiled the simplified set of tacit knowledge items obtained from the interviews into a survey (Tacit Knowledge Survey; TKS). The TKS was administered to Army officers attending one of six U.S. Army Training and Doctrine Command (TRADOC) schools. We asked the officers to rate the "quality" of each tacit-knowledge item. Specifically, we asked officers to make the following judgments about each tacit-knowledge item: (1) how good does the respondent think the advice is, (2) how commonly known does the respondent think the advice is, (3) how often do leaders at the specific level face situations such as the one described, and (4) to what extent does the advice match the respondent's personal concept of leadership?

Based on the TKS ratings, we then sought to identify items that best discriminated between experienced and novice officers as well as more and less effective leaders. To do so, officers were designated as experienced or novice company commanders based on their enrollment status in TRADOC schools and their previous experience. Officers enrolled in the Officer's Advanced Courses (Infantry, Signal, Combined Logistics, Engineer, and Field Artillery) were designated as novice company commanders because they had not yet held command. Officers enrolled in the Command and General Staff College were designated as experienced company commanders. In a separate sample from the U.S. Army Forces Command (FORSCOM), we obtained ratings of leadership effectiveness for each respondent from his or her

peers, superiors, and subordinates. Tacit knowledge items that received a much higher quality rating from experienced than novice company commanders, and from more effective leaders, were viewed as having the best discriminating potential. That is, they were more likely to represent knowledge that is characteristic of experienced and successful officers. These items were identified as most promising for use in the Company Commander Questionnaire.

Inventory Construction

The next phase involved constructing an inventory that could be administered to company commanders to assess the relationship between measured tacit knowledge and measured effectiveness. To construct the inventory, we included items that best represented the categories of tacit knowledge derived in the interview study and best discriminated between experienced and novice officers as well as more and less effective leaders. We constructed preliminary tacit knowledge questions using the selected items and the interview summaries from which they were drawn. The selected tacit-knowledge items were expanded into a scenario that posed a leadership problem, along with a set of 5 to 15 possible responses to the scenario (see Appendix A for an example of a tacit-knowledge question). Respondents are typically asked to rate the quality of these response options for addressing the situation presented.

Once a preliminary inventory was constructed, we distributed copies of the inventory to a focus group of officers (majors and captains) assigned to the faculty and staff of the U.S. Military Academy (but external to the research team) who had served as company commanders. We explained to these officers the goals of our project and how we defined tacit knowledge in the context of military leadership. We then asked the members of the focus group to evaluate the "fit" of our inventory questions to the tacit-knowledge construct. We asked members questions such as "Does this question represent the type of problem that leaders learn to solve through experience?" and "Does this question tap knowledge of the sort that we have defined as 'tacit knowledge'?" We also asked focus group members to help "fill gaps" and "fix problems" in the inventories. In particular, we asked them to a) provide additional, plausible response options for any question, b) identify areas of confusion or lack of clarity, c) identify problems of gender, racial, ethnic, or "branch" bias, and d) identify anything that did not "ring true" in the inventory questions. We then revised the inventories based on the judgments and suggestions of the focus group members.

Construct Validation

Throughout the development of the CCQ, we sought to provide support for the validity of our instrument. The goal of establishing validity is to show that an instrument in fact measures what it is intended to measure. For our purposes here, this means that the questions composing the CCQ measure tacit knowledge relevant to company commanders and that scores on the inventory relate to a relevant external criterion (i.e., leadership effectiveness). We first discuss the internal structure of the CCQ, including how we ensured the relevance and representativeness of the tacit knowledge items included in the inventory. We then present results from our construct validation study on the CCQ, including evidence of its reliability and the relationship between tacit knowledge and leadership effectiveness.

Internal Structure

In developing the CCQ, we attempted to include tacit knowledge items that were both relevant to the construct of tacit knowledge and representative of the entire domain of tacit knowledge for company commanders. The relevance of the items was supported initially by asking officer to talk about their personal experiences rather than leadership doctrine or theory, and later by asking a sample of experts to judge the relevance of each item to the tacit knowledge construct. With construct representativeness, the goal is to include items that are applicable to a broad sample of company commanders. We obtained a representative sample of items by asking experts during various stages in the inventory development to identify and remove items that were too technical or narrow in focus, or exhibited racial, ethnic, or gender bias.

Another way to insure the representativeness of the items included in our inventory is to understand the underlying structure of the tacit knowledge construct. In other words, is the tacit knowledge of company commanders characterized by different types, or categories, of knowledge? As a preliminary step in the development of the CCQ, we sorted the tacit knowledge items into categories reflecting the main areas of tacit knowledge relevant to company commanders. In constucting the inventory, we selected items to represent each of these categories. In Table 2 (shown above) we show the questions included in the CCQ that are associated with each category.

In addition to these categories, we sought to identify broader themes (dimensions) reflected by the tacit-knowledge items we obtained. These themes were considered to represent the developmental challenges faced by company commanders and are summarized in Table 3. We later examined the extent to which these themes were characteristic of the knowledge exhibited by officers who responded to the CCQ. In our construct validation study (described in more detail below), we used a statistical technique, called principal components factor analysis, to assess the extent to which the final tacit-knowledge questions reflected the themes identified in the earlier stages of the inventory development. We found that there were multiple dimensions, or factors, of tacit knowledge represented in the CCQ (as indicated by eigenvalues greater than one; see Hedlund et al., 1998). Two of these factors were readily interpretable and were labeled "tacit knowledge about dealing with the boss" and "tacit knowledge about motivating and developing subordinates." The questions composing each factor are identified in Table 4.

Table 3.
Dimensions of Company Commander Tacit Knowledge

Dimension	Label	Explanation
1	Caring for soldiers through task completion	Knowing your job and making subordinate soldiers "do the right thing" (in terms of training readiness and task accomplishment) as a means of demonstrating to them that the leader cares for them
2	Prioritizing and solving problems	Dealing with day-to-day problems; communicating priorities and providing guidance to solve problems
3	Proactive decision-making	Thinking ahead to anticipate problems; sharing information so that subordinates can assist in proactive problem solving
4	Assessing risk	Determining the potential liabilities of an action; using team building to identify and potentially reduce hazardous situations
5	Short-term decision making	Providing face-to-face directions to influence an action at a critical moment; making decisions that facilitate day-to-day operations

Table 4.
Factor Structure of the Company Commander Questionnaire

Managing the boss	Motivating and developing subordinates
C4	C3
C5	C8
C6	C13
C11	C15
C14	C16
C18	
C19	

Note: Question numbers refer to the revised inventory included in this report.

Reliability

The initial CCQ contained twenty tacit knowledge questions. A question consists of a leadership problem and several possible responses. We instructed company commanders to rate each response option separately according to how well it addressed the problem. Company commanders' responses were scored based on how far their ratings were, on average, from a group of designated experts who also completed the questionnaire. (This distance scoring method is described in Hedlund et al., 1998). Using this method, the closer a company commander's ratings were to the experts, the greater his or her tacit knowledge for military leadership.

Each question in the inventory is intended to contribute to the measurement of an officer's overall tacit knowledge for military leadership. Ideally, these questions should fit together well as a whole; that is, they should consistently measure the same concept. Tacit-knowledge inventories, however, are unique in that they consist of complex questions that measure rather specific knowledge. Officers may vary in the consistency of their responses depending on their familiarity with the situations presented in these questions. As such, we do not expect to obtain the same level of internal consistency as those found for other measures (e.g., verbal reasoning tests). We consider lower levels of reliability (values for coefficient alpha below .80 on a scale from .00 to 1.00) to be acceptable for our purposes. Using coefficient alpha to measure internal consistency, we obtained an initial reliability for the 20-item CCQ of .75. Given the complexity and the preliminary nature of our instrument, we considered this level acceptable and proceeded to examine the data further to identify potential questions that may have affected the internal consistency of the inventory.

We identified two questions that exhibited poor "fit" with the rest of the inventory. In other words, these questions had a low correlation with the inventory as a whole. Military members of the research team examined the content of these questions further to determine why these questions may have exhibited a lack of fit and to determine if changes could be made to address the problem. The first question we examined (original question C4), contained only four response options.[1] We decided that this was too few response options to adequately tap different levels of tacit knowledge. There was not enough original material (e.g., leadership stories, advice) to expand upon this question so it was removed from the inventory. After removing this question, the reliability of the inventory was .76. The other question we examined (original question C5) appeared to present a fairly clear problem with potentially strong cultural norms about the "right" response in this situation. That is, certain responses may have been widely accepted as more appropriate than other responses. As such, officers may not have varied their responses greatly. Since we did not feel there was any structural problem with this question, and it "fit" conceptually with the definition of tacit knowledge for military leadership, we decided to retain this question in the inventory. After removing one question, the revised Tacit Knowledge for Military Leaders: Company Commander Questionnaire presented here contains 19 questions and has a reliability of .76 (see Appendix A). We have renumbered the questions to reflect this change.

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[1] Question numbers refer to the initial version of the inventory used in the construct validity study (see Hedlund et al., 1998).

Criterion-Related Validation

In the preceeding discussion, we focused on the internal structure of the inventory, describing the steps we took to ensure that the questions appropriately measured the construct of tacit knowledge. Validity is also established in reference to external criteria. In other words, the CCQ should not only provide an effective measure of tacit knowledge, it should also serve as a valid indicator of leadership performance (criterion-related validity). Our work was predicated on the expectation that leaders who possess greater tacit knowledge are more effective than those with less tacit knowledge. We also proposed that this tacit knowledge would explain leadership performance better than other potentially valid measures like general verbal ability and experience.

In order to assess the criterion-related validity of the CCQ, we administered measures of verbal ability (the Concept Mastery Test; Terman, 1950), experience, and tacit knowledge for civilian management (the Tacit Knowledge Inventory for Managers; Wagner & Sternberg, 1991) along with the CCQ to our sample of 157 company commanders from six posts across the U.S. A measure of verbal ability was included because general ability is commonly used as a predictor of performance in many professions. Our aim was to show that tacit knowledge could explain performance better than verbal ability. Experience, as measured by the number of months in current job, was included to show that tacit knowledge is more than just the amount of experience one has; it is what one learns from experience that matters. Tacit knowledge for managers was measured to show that tacit knowledge is domain-specific. That is, we expect that tacit knowledge for leaders should explain leadership performance better than tacit knowledge for managers. Finally, for the criterion of leadership performance, we obtained ratings of each company commander's overall, task, and interpersonal effectiveness from his or her battalion commander, fellow company commanders, and platoon leaders under his or her command.

The CCQ was scored by comparing company commanders' responses to those of designated experts (the distance scoring method is described in Hedlund et al., 1998). We found that company commanders who possess greater tacit knowledge, as indicated by high agreement with the experts' ratings, were rated as more effective by their fellow company commanders on overall and task-related dimensions of leadership (correlations of .19 and .20 respectively). The two subscales of the CCQ identified above also exhibited significant relationships with leadership effectiveness. Specifically, company commander with greater tacit knowledge about dealing with the boss were rated as more effective by their battalion commanders, and those with greater tacit knowledge about motivating and developing subordinates were rated as more effective by their platoon leaders.

Experience and tacit knowledge for managers showed no relationship with perceived effectiveness. Verbal ability correlated modestly with effectiveness, but in all cases tacit knowledge explained leadership effectiveness over and above verbal ability.

The results of our preliminary study to assess the validity of the CCQ are encouraging and suggest that tacit knowledge has the potential to contribute to our understanding of what it takes to be an effective leader. However, we caution potential users of the CCQ against

overinterpreting these findings. The results are based on data from a limited sample of company commanders and do not constitute an extensive validation of our instrument. Although we found evidence that tacit knowledge has some relationship to effectiveness ratings made by officers at three levels in the chain-of-command, we did not find significant relationships between the overall score on the CCQ and ratings by platoon leaders and battalion commanders. Also, the relationships we found for scores on the CCQ subscales were not consistent across all dimensions of leadership that were rated. Due to the preliminary nature of these results, we do not recommend that the CCQ be used as a basis for personnel decisions or for any other comparisons between officers. But we do feel that the CCQ has much to offer as a potential leadership development tool. We discuss below some potential applications of the CCQ.

Applications in Leader Development

Our work thus far suggests that tacit knowledge, as measured by the CCQ, plays a role in understanding leadership effectiveness. Specifically, we found that company commanders with higher tacit knowledge were perceived as more effective by their peers, and for two subscales of the CCQ, they were seen as more effective by their battalion commanders and platoon leaders. These findings increase our confidence that, as a product of our work, the CCQ may be useful to leadership development and organizational learning initiatives. In this final section, we elaborate on some of the potential uses of this product, which is included as Appendix A.

Potential Uses

The objective of our work all along has been to identify an important area for leadership development and to offer potential tools to assist in that development. Tacit-knowledge inventories are not intended, or commonly used, as a basis for employment decisions such as selection and promotion. Although our preliminary data indicate that tacit knowledge does exhibit some relationship with leadership effectiveness, it would be inappropriate to use performance on the CCQ to evaluate one's ability or potential ability to be an effective leader. The acquisition of tacit knowledge depends on the ability to learn from experience and the opportunities available to learn. A low tacit knowledge score may represent a lower level of knowledge than the experts, or it may simply indicate that an officer does not agree with the experts' tacit knowledge. We recommend that the CCQ be used as a developmental tool to share the "lessons learned" of others, to stimulate discussions, and to evaluate one's own tacit knowledge relative to the experts. We discuss some potential uses of the inventory and the data we have obtained so far (see also Horvath et al., 1998).

Identification of developmental opportunities.

The tacit-knowledge questions and the categories they represent can provide insight about the key developmental opportunities officers may face. The tacit knowledge we elicited reflected critical situations in which leaders learned something about how to be an effective leader. Officers can refer to the categories and dimensions of tacit knowledge referenced earlier (see Tables 1 and 2) to identify the major areas of leadership development. They can then consult the associated tacit-knowledge questions to learn more about the types of situations that are relevant

to those categories. The scenarios may suggest particular situations that leaders should attend to in their own experiences, situations that may offer them important developmental opportunities.

Reading through the tacit knowledge questions may also give company commanders insight about their own experiences and what they have learned. For example, after reading about a company commander's dealings with an insubordinate platoon leader, an officer may reflect back on a similar experience he or she has faced. The officer can compare how his or her response relates to the options that accompany the tacit knowledge scenario.

Classroom instruction and discussion.

The CCQ may also serve as a stimulus for classroom instruction and discussion. The tacit knowledge questions represent potentially rich sources of insight into the practical knowledge that guides action. We found that tacit knowledge was embedded in situations and stories that leaders shared about their experiences. As such tacit knowledge is conducive to case-based instruction, which is a powerful and proven way of teaching professionals. Each leadership scenario and its associated response options can be treated as a case to be reviewed and evaluated as part of a class assignment. Instructors may also be interested in acquiring the original leadership stories from the authors to examine the cases in more depth.

The scenarios included in the CCQ could be used to stimulate group discussion. For example, officers could be asked to review a scenario about a missing weapon and its associated response options. They could then be asked to discuss what they would do about the missing weapon, why they would consider certain options to be better than others, and what might be the potential effects of choosing a particular option. The tacit knowledge categories and dimensions, as described above, can help organize the content of the tacit knowledge material and suggest areas of leadership development that deserve emphasis.

To supplement the tacit knowledge questions, instructors can also make use of the expert response data. For our construct validation study, we obtained ratings from designated experts for each question in the CCQ. Twenty-nine majors and lieutenant colonels attending the Pre-Command Course for battalion command were selected based on their success as company commanders to serve as the expert group for the CCQ. We administered the CCQ to this expert group and used their responses to create an expert profile for the inventory.

These data can be used to generate expert "rules of thumb" regarding which response options the experts viewed as more and less appropriate. Instructors could teach these "rules of thumb" directly or use them to stimulate class discussion. The latter may be a more appropriate use of the expert data since there may be disagreement about which responses are viewed as good or bad according to the experts and instructors.

The expert "rules of thumb" can be most readily seen by examining the percentage of experts who rated each response option in the following categories: bad (a rating of 1, 2, or 3), neither good nor bad (a rating of 4, 5, or 6), and good (a rating of 7, 8, or 9). Graphs showing the pattern of expert responses for each scenario are included as Appendix B. The response options are indicated on the vertical axis and the percentage of experts rating the response option as bad

(shown in black), neither good nor bad (shown in gray), or good (shown in white) is indicated on the horizontal axis. The graphs are interpreted by examining the distribution of experts in each of the three response categories. A high percentage of responses in the bad category (black) shows that most of the experts considered this option to be bad. A high percentage of responses in the good category (white) means this option was considered to be a good one by most of the experts. A fairly equal percentage in all three categories indicates that the experts did not express strong agreement that the response option was bad, neither, or good. In looking at question C1, for example, it is clear that options 9, 11, and 14 were considered bad by the majority of experts, while options 1, 2, 5, 10, and 12 were considered good by most.

For a given scenario, an officer can refer to the graph and readily identify options that were clearly viewed as good or bad by the experts. This expert advice could be taken at face value or evaluated further to determine why the experts may have seen the particular option as good or bad. Officers in a leadership development course could be asked to discuss their agreement or disagreement with the experts' ratings. A valuable exercise might also involve examining the options that the experts rated in the middle, or for which the experts did not agree, and to consider why these options were rated as such. Since we do not have data regarding the experts' justification for their responses, a class activity could entail asking officers to develop potential explanations for the experts' responses. This activity would encourage officers to examine the problem more closely and to consider possible contingencies that may result in a particular response appearing more or less appropriate.

Self-assessment.

Many of the uses discussed above can also be applied to self-study. Officers can review the scenarios on their own and evaluate the expert responses. They can also gain feedback about their own tacit knowledge relative to the experts by completing the inventory and scoring their responses. Officers can answer the tacit knowledge questions by following the instructions provided. They can then refer to the scoring procedures described below to score their responses and assess their level of tacit knowledge.

Officers can evaluate their scores on a particular question, in a certain category, or on the inventory as a whole. The scores can be used for diagnostic purposes to assess how much tacit knowledge an officer has acquired compared to expert company commanders. An officer may identify certain areas in which he or she needs to seek out additional learning opportunities. Once again, scores on the CCQ should not be interpreted to suggest that some officers have higher ability than others do.

Scoring and Interpretation

The scoring procedure for the CCQ involves comparing one's responses to those of the experts. Once again, these scores are not intended for use in comparing officers in terms of their level of tacit knowledge. In order to allow potential users to score their responses to the inventory, we have developed a simple, user-friendly scoring procedure based on the expert profile we used to score the inventory in our research. (A more precise scoring method is described in Hedlund et al. (1998) that involves computing the actual distance of each response

from the expert mean. The expert data and a method for computing distance scores are available from the authors.)

The scoring procedure presented here is based on the sample of 29 majors and lieutenant colonels attending the Pre-Command Course (as described above) who were designated as expert company commanders. Their responses to the CCQ were used to compute an expert profile consisting of a mean and standard deviation. The mean represents how the experts, on average, rated the response option on a scale from bad (1) to good (9). For example, a mean rating of 2.5 indicates that the experts, on average, felt the option was bad. A mean rating of 4.5 indicates that the experts generally considered the option to be neither good nor bad. And an 8.5 would mean the experts generally viewed the option as good. The standard deviation indicates the variability among experts in their responses (i.e., the extent to which the experts agreed that a response was good or bad). A smaller standard deviation indicates that the experts generally agreed in their ratings of a particular response option. A larger standard deviation suggests that the experts varied in their ratings.

Using this information, we can create a confidence interval around the mean. This confidence interval represents the values within which the true expert mean is likely to fall, given that our experts varied in their responses. In other words, this confidence interval takes into account the variability in the experts' responses in determining the true mean rating for the expert group. We have chosen to use a confidence interval that consists of the mean plus or minus one standard deviation. In other words, almost 70% of the expert population will fall within this interval in their ratings. This interval can be used to gauge how expert-like one's responses are. Responses that fall within this interval can be considered in greater agreement with the experts than those that fall outside the interval.

We have developed charts for each question that present the confidence interval around the expert mean so that respondents can evaluate their agreement with the experts. Answer sheets are included as Appendix C and the charts for scoring one's responses are provided as Appendix D. The instructions accompanying the CCQ ask you to rate, on a scale from 1 to 9, how well each response option addresses the leadership situation described. The answer sheet corresponding to the question number (e.g., C1) can be used to record your ratings. The response options for each question are numbered in the order that they appear in the inventory. After answering all the options for a particular question or the entire inventory, you can refer to the scoring charts.

The scoring charts again indicate the question number (e.g., scenario C1) and the response options (in the order presented). For each answer, refer to the corresponding question and response option on the scoring chart. The response options are indicated on the vertical axis and the rating values (1 through 9) are shown on the horizontal axis. The scoring chart shows a 70% (approximate) confidence interval around the expert mean (indicated in white). Scoring your answer involves determining if your rating falls within the expert confidence interval, or the white range, for that response option. If your response is within the interval, record a "1" on the answer sheet. If your response falls outside the interval, record a "0" on the answer sheet. For example, if you rated question C1, response option 1 a "7" your answer falls within the 70% interval of the expert mean. You would receive one point and would be considered in agreement

with the experts. If you rated the same question a "6" your answer falls outside this interval and you would receive a zero.

Once you have scored all your responses for a question, you can add up the points in the second column and record next to total score. To evaluate your tacit knowledge for individual questions, you can divide your total score by the number of response options. To assess your overall tacit knowledge on the CCQ, sum the total score for all 19 questions and divide by 178. This will provide you with a percentage (out of 100%) of the number of questions for which your ratings agree with those of the experts. The higher the percentage, the greater your level of tacit knowledge for military leadership. For example, if your total points are 156, your score would be .88 meaning that you agreed with the experts on 88% of your responses and thus exhibit fairly high tacit knowledge. Using the same procedures, you can also compute scores for subsets of questions such as those associated with the categories indicated in Table 2 or the factors indicated in Table 4. These scores should be used only for the purposes of self-assessment, that is, to evaluate one's own level of knowledge compared to the experts.

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APPENDIX A

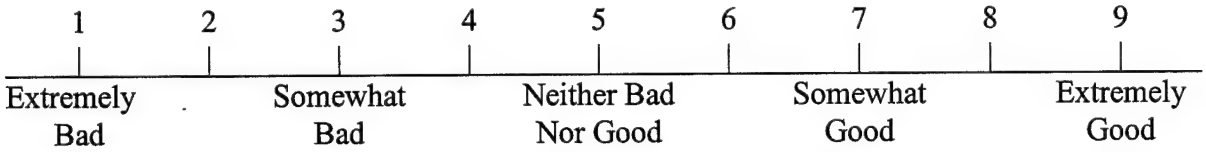
TACIT KNOWLEDGE FOR MILITARY LEADERS: COMPANY COMMANDER QUESTIONNAIRE

TACIT KNOWLEDGE FOR MILITARY LEADERS:
COMPANY COMMANDER QUESTIONNAIRE

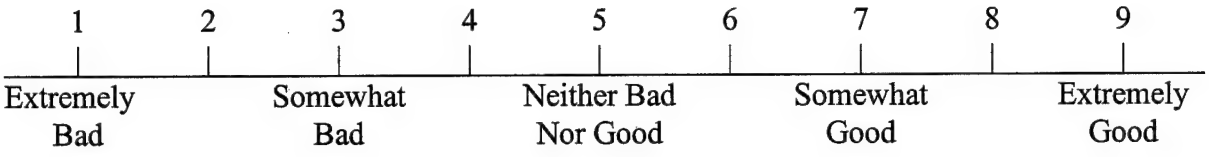
OVERVIEW AND INSTRUCTIONS

This survey was developed as part of the Tacit Knowledge in Military Leadership project to measure the practical, action-oriented knowledge that Army leaders acquire on the job. The project's main objectives were to identify the important lessons of experience that enable officers to be effective leaders and to use that knowledge to enhance leadership development.

This survey consists of descriptions of typical situations encountered by military leaders. After each situation, there are several options for how to handle the situation. For each option listed, you are to rate the quality of the option on the following 1-to-9 scale:



Select the number corresponding to your answer, and write it in the blank preceding the option (or on the answer sheet provided). Remember that some or all of the options listed for a particular question may be good, some or all of the options may be bad, or some or all of the options may be neutral (neither bad nor good). There is no one "right answer," and in fact there may be no "right answers." The options are simply things an officer at this level might do in the situation described. Please rate each individual option for its quality in achieving the goal or solving the problem described in the question. Do not try to "spread out your ratings" just for the sake of doing so. If you think all of the options are good, bad, or whatever, rate them accordingly. DO NOT BE CONCERNED if the numbers are all 9s, all 5s, all 1s, one 9 and the rest 1s, or any other mix. Your answers should reflect your opinions about the quality of the options.



C1. You take over a newly-formed company as a company commander. At the same time, the company also receives a new first sergeant, two new platoon leaders, two platoon sergeants, and a supply sergeant. You quickly begin to perceive that the soldiers in the company have a bad attitude regarding training. A few weeks after taking command, you deploy the unit to the field for a 21-day Field Training Exercise (FTX). There, you again observe (on the second day of the FTX) that the soldiers' performance is poor. For example, their stand-to procedures don't meet your standards. What should you do?

_____ Call your key leaders together and communicate your training standards in terms of the company's METL.

_____ Sit down with your first sergeant, discuss the situation, and ask for his opinion.

_____ Talk to the informal leaders in the company (for example, specialists who have demonstrated knowledge gained by reading field and training manuals) privately to find out why the soldiers have a negative attitude about training.

_____ Call a company meeting and communicate clearly your training standards in terms of the company's mission-essential task list.

_____ Speak to your platoon leaders as a group, but away from the soldiers, tell them your standards and show them how to deal with the stand-to problem.

_____ Speak with each of your platoon leaders individually and privately and tell each one to deal with the problem.

_____ Give the platoon leaders several more days to conduct their own training so that you can more closely observe and interact with the soldiers.

_____ Personally inspect the stand-to procedures--inspect each fighting position and range card yourself.

_____ Call a company meeting, tell the platoon leaders to stand off to the side, ask the soldiers why their performance is poor, and listen to their reasons.

_____ Get the first sergeant and the platoon leaders together to discuss the situation with you.

_____ Threaten disciplinary action to the entire company if the stand-to procedures are not performed well during your next inspection.

C1, Continued

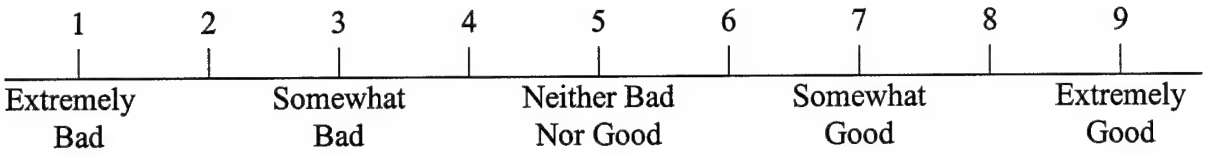
_____ Conduct an After Action Review on stand-to and define your criteria for success.

_____ Speak to the battalion commander and get his advice and direction regarding the best way to handle the problem.

_____ Call a company meeting fully involving the platoon leaders, ask the soldiers why their performance is poor, and listen to their reasons.

_____ Investigate where the soldiers got their prior ideas about what constituted acceptable standards.

_____ Bring in the entire chain of command, all at once, for a group discussion about the situation.



C2. You are a company commander on your final National Training Center (NTC) rotation as a company commander. Your company is cross-attached to a mechanized infantry battalion to form a task force. Before you deployed to the NTC, you were given a new platoon leader (and his platoon) who had been transferred from another company in order to get a second chance. You have reason to believe he is weak tactically. When the task force is organized into company teams, you are required to provide a platoon to an infantry company. You have been advised by your first sergeant to send this new platoon over to the infantry company. What should you do?

_____ Give the weak lieutenant specific step-by-step instructions regarding how to do his job.

_____ Talk to the first sergeant, ask him to explain the reasons for his opinion, and listen to these reasons closely before making a decision.

_____ Send your best tank platoon over to the infantry company.

_____ Keep both your strongest and weakest platoons and send an average-performing platoon over to the infantry company.

_____ Send the new platoon leader and his platoon over to the infantry company.

_____ Speak to the soldiers in the poorly-performing platoon: Tell them you have confidence in their ability to perform well, and that to display your level of confidence you are sending them over to the infantry company where they will represent your company.

_____ Send the platoon you would normally send.

_____ Send the weak platoon leader out with a strong company to observe and learn, without giving him any responsibility.

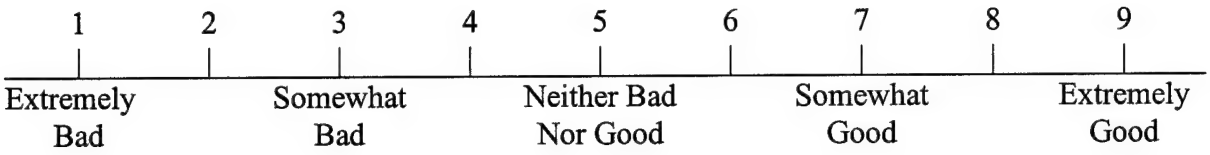
_____ Have a closed-door talk with the weak lieutenant: Tell him he has a free opportunity to learn here, and he should do his best to learn what he can and then call you with any problems.

_____ Speak to your battalion commander and tell him that you were given this new, ill-prepared platoon leader before you deployed to the NTC, and ask for his direction in making your decision.

C2, continued

_____ Speak to the platoon leader; try to uncover the reasons for his weaknesses, and deal with these issues as best you can.

_____ Tell your platoon sergeant to look out for the weak lieutenant.



C3. You are a company commander, and your battalion commander is the type of person who seems always to "shoot the messenger"--he does not like to be surprised by bad news, and he tends to take his anger out on the person who brought him the bad news. You want to build a positive, professional relationship with your battalion commander. What should you do?

_____ Speak to your battalion commander about his behavior and share your perception of it.

_____ Attempt to keep the battalion commander "over-informed" by telling him what is occurring in your unit on a regular basis (e.g., daily or every other day).

_____ Speak to the sergeant major and see if she/he is willing to try to influence the battalion commander.

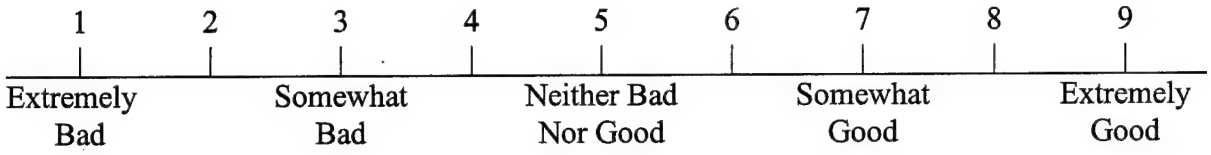
_____ Keep the battalion commander informed only on important issues, but don't bring up issues you don't have to discuss with him.

_____ When you bring a problem to your battalion commander, bring a solution at the same time.

_____ Disregard the battalion commander's behavior: Continue to bring him news as you normally would.

_____ Tell your battalion commander all of the good news you can, but try to shield him from hearing the bad news.

_____ Tell the battalion commander as little as possible; deal with problems on your own if at all possible.



C4. You are a company commander on a battalion-level field training exercise. Your unit has just completed a night move and has been in position for about two hours. At midnight, you learn that a weapon is missing. The platoon sergeant with responsibility for weapons is confident that he knows where the weapon is because he saw it during the sensitive-items check completed after he arrived. A sensitive-item report is due to brigade at 0400 hours. What should you do?

_____ If you are confident the weapon will be found at first light, submit a sensitive-item report stating that all weapons are accounted for.

_____ Do not speak to the battalion commander until shortly before the sensitive-item report is due; at this point, completely and honestly report all of your actions since the weapon was discovered missing.

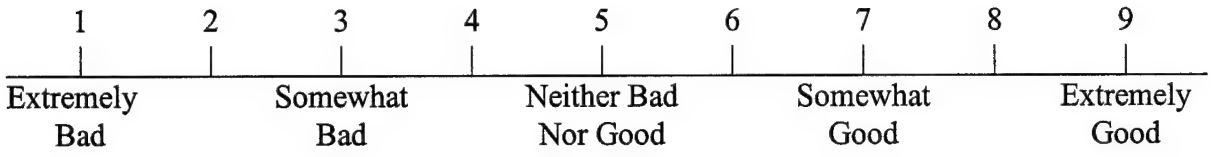
_____ Immediately mobilize everyone in the unit, and conduct a 100% inventory followed by a hands-on search.

_____ Before the sensitive-item report deadline, notify the battalion executive officer of the situation in person.

_____ Consult the standing operating procedures manual to ensure that you follow the rules correctly.

_____ Immediately notify the battalion commander and tell him your plans for finding the weapon and resolving the incident.

_____ If the weapon is not located within one hour, notify the entire chain of command of the lost weapon.



C5. You are a company commander. Your battalion is training for gunnery. Currently, all of the companies are well-prepared to pass gunnery. There is a great deal of competition among the companies and all of the commanders have Officer Evaluation Reports (OERs) due in the next few months. You have an NCO (platoon sergeant) in your unit who just arrived from teaching gunnery at the branch school. He tells you about some advanced training techniques using available equipment that have significantly improved gunnery scores in other units. This information has not been made available to units in the field. After some practice with the techniques, you find that they significantly improve the scores of your sections. What should you do?

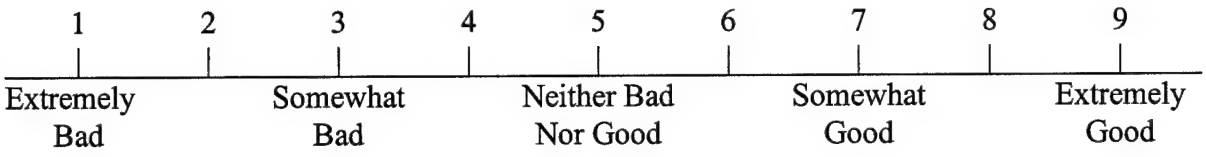
_____ Do nothing--allow the information about the training techniques to be passed through NCO channels if it comes up.

_____ Share the information about the training techniques with the battalion commander, then tell all of the other company commanders.

_____ Train your company using the information, execute gunnery--presumably beating all of your fellow company commanders--then tell everyone how you did it after the fact.

_____ Initiate a meeting with all company commanders, platoon leaders, first sergeants, and platoon sergeants, and have your new platoon sergeant present and describe the techniques.

_____ Tell the platoon sergeant to keep close hold over the information about the training techniques so that only your company possesses this information.



C6. You are a battery commander. Consequently, you work for both your battalion commander and the brigade commander whom you support. During preparation time for the National Training Center (NTC), you are also preparing for a Battle Command Training Program (BCTP). Your battalion commander is interested in the BCTP, but the maneuver brigade commander wants you to focus on the NTC. What should you do?

_____ Find out from the battalion commander what his priority is: Get your battalion commander's guidance and act accordingly.

_____ Focus on BCTP regardless.

_____ Place your priority on the training event that will most benefit your soldiers (NTC), regardless of the wishes of the battalion and brigade commanders.

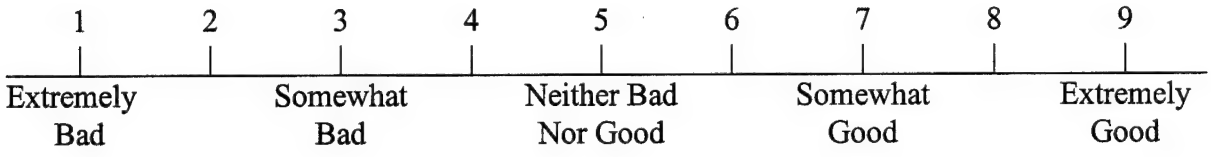
_____ Focus equally on the two training events.

_____ If both training events have equal training value, then support the event scheduled by your battalion commander (BCTP).

_____ Focus on NTC regardless.

_____ Focus on your weakest area.

_____ If both training events have equal training value, then support the brigade commander's wishes (NTC).



C7. You are a new company commander. There are a lot of things you want to fix in the company. You have quickly become overwhelmed by the many pressures you face and the many demands on your time. You realize that you cannot possibly do everything. What should you do to better manage your key leaders and your time so that you are able to accomplish more in the same amount of time? Rate the following strategies:

_____ Have your key leaders execute the alternative <u>after</u> you select it.

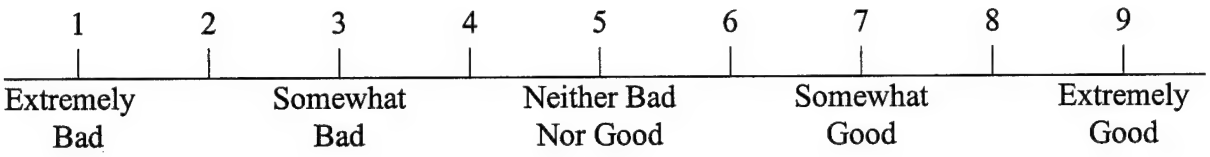
_____ Allow key leaders <u>on their own</u> to select alternatives to solve problems and implement these strategies.

_____ Use key leaders to solve problems by having them research alternatives in their area of responsibility that would solve the problems and report these alternatives to you.

_____ Try to report earlier in the morning and/or stay later at night to get more done.

_____ Give your key leaders more specific directions when it comes to solving problems--tell them what to do to get the job done.

_____ Learn to spot check by walking around the company area and getting a general idea of what's going on--don't feel compelled to check every single thing personally.



C8. You are a new company commander who has just taken over your unit. One of your soldiers is leaving the army. The supply sergeant brings you a Report of Survey and a $250 Statement of Charges for the soldier's missing TA-50 and asks you to sign one or the other. You talk to the soldier and learn that the equipment was lost on re-deployment and that the chain of command had not taken appropriate action. The soldier had notified the old commander three times in writing, saying that his equipment was missing--but the commander took no action because he did not want to submit a late Report of Survey. (The Battalion Commander also did not want any late reports of survey.) The soldier says he will sign the Statement of Charges because he just wants to get out. What should you do?

_____ In spite of his dislike for late reports, notify the battalion commander that you are initiating a late report of survey on the soldier's lost TA-50.

_____ Have the supply sergeant validate the statements made by collecting relevant information from the soldier and other sources, put this information together, and bring it to the battalion commander.

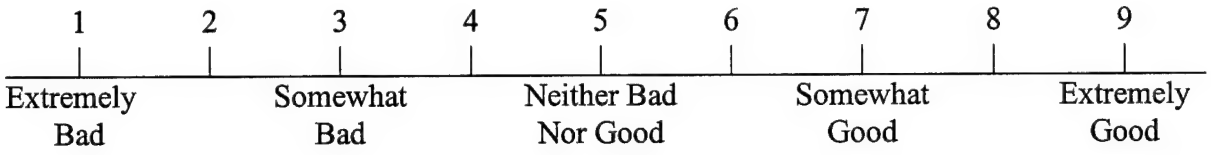
_____ Initiate a late report of survey without first informing the battalion commander.

_____ Point out to the battalion commander that the chain of command failed to properly uphold its responsibility and failed the soldier, and explain that this situation must be rectified now.

_____ Allow the soldier to sign the Statement of Charges so that he can leave.

_____ If the battalion commander is hard on company commanders who initiate late Reports of Survey, do not initiate the report.

_____ Attempt to contact the past company commander to find out why, exactly, he did not take care of the situation.



C9. It is the first week of your command as a new company commander, and you want to establish yourself quickly as an effective leader. You have assessed the current physical training program, and you believe it could use a total overhaul in order to ensure that the company will meet the PT standards. Your company does not have a qualified master fitness trainer. What should you do?

_____ Ask for a volunteer from the entire company to take charge and run the PT program, and supervise this individual very closely.

_____ Talk to your first sergeant and get his/her advice.

_____ Ask for a volunteer from among your platoon sergeants and platoon leaders to take charge and run the PT program, and supervise this individual very closely.

_____ Offer a reward or incentive to any soldier who comes up with the best idea for how to revamp the PT program.

_____ Publicly praise and reward soldiers who demonstrate initiative in revamping the PT program.

_____ Consult a fellow commander who has a solid fitness program for guidance and suggestions.

_____ Ask for a volunteer from among your platoon sergeants and platoon leaders to take charge and run the PT program, and give this person the authority to do it his/her way.

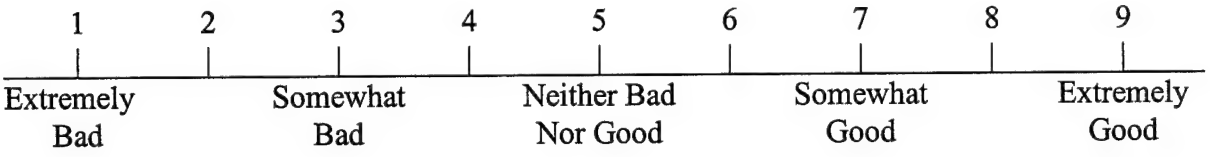
_____ Assess the company's other goals and decide which of the goals is most important before taking action on the PT program overhaul.

_____ Appoint the most competent person to work with you in revamping the PT program.

_____ Ask the soldiers and key leaders for their ideas and suggestions before deciding on a course of action.

_____ Ask for a volunteer from the entire company to take charge and run the PT program, and give this person the authority to do it his/her way.

_____ Speak with your battalion commander to get his/her suggestions regarding the PT overhaul before deciding on a course of action.



C10. You are a new company commander. The previous commander was a micromanager. This individual was extremely detail-oriented, gave very little positive feedback and often tore down the platoon leaders when even the slightest infraction occurred. For example, the old company commander noted one day that one of the platoon leaders was wearing a dirty soft-cap, and he called the entire platoon a disgrace. This behavior on the part of the outgoing company commander was very hard on the platoon leaders. Several developed nervous conditions such as ulcers and sleep problems. Your goal is to create a more positive leadership atmosphere in the unit. What should you do?

_____ Give all unit members more responsibility than they had before, and hold them accountable.

_____ When you must give negative feedback to your platoon leaders, do so constructively, pointing out specific areas that need improvement and explaining how this improvement can be achieved.

_____ Allow the platoon leaders and their soldiers the benefit of the doubt--don't jump to negative conclusions.

_____ Assign work goals with clear milestones to all officers.

_____ Involve senior NCOs in the decision-making process.

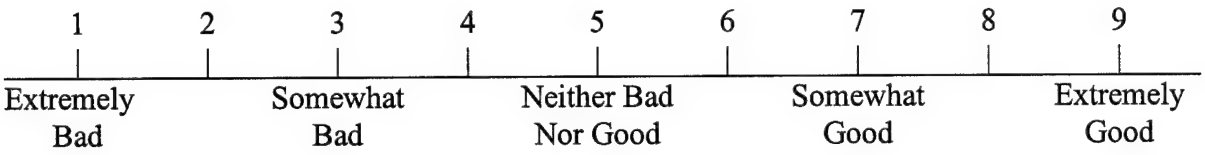
_____ Give the platoon leaders frequent, specific positive feedback.

_____ Continue with the micromanagement style since it is common practice in the company, and relieve and/or replace the lieutenants who cannot handle the stress.

_____ Let your subordinates know your intent and then let them develop their own plans.

_____ Recognize soldiers' achievements with awards.

_____ Have positive expectations: State often that you believe that every member of the unit has the ability to perform well if he or she applies himself or herself and works hard.



C11. You are a company commander with a new brigade commander. Before the new brigade commander took over, the battalion conducted After Action Reviews by critiquing each training task according to the Mission Training Plan. The new brigade commander asks to see how AARs are conducted in the brigade--he wants to find someone who does AARs improperly so he can use this individual as an example to show what needs to be improved. When the brigade commander observes you he says he does not like your AAR format and he feels you are critiquing instead of letting the soldiers talk. Thus, you must now develop a system for listening more to your soldiers while still maintaining an effective command. Rate the quality of the following strategies.

_____ Ask yourself why you talk when you do and evaluate whether you need to speak at these times to optimally benefit your unit.

_____ Listen most to soldiers who have the best interest of the unit at heart and have no hidden agendas.

_____ Ask around among the soldiers to discover the informal leaders in the group, then seek out and listen to these soldiers.

_____ Try listening at moments when you would customarily talk.

_____ When soldiers' safety is at risk, use directive leadership instead of listening.

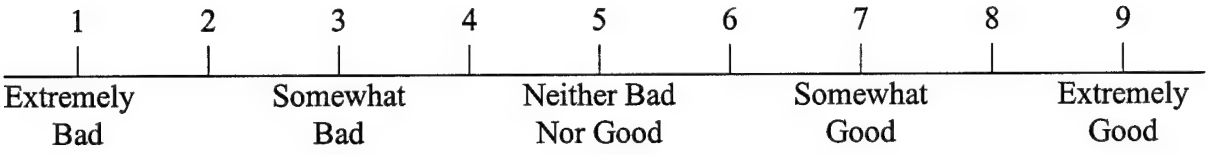
_____ Whenever you have time, seek out your soldiers, ask them questions, and listen to their opinions and views.

_____ Do not listen to soldiers when they lack the knowledge necessary to make a decision.

_____ Schedule regular meetings with your NCOs when you just sit and talk about the unit--and make these meetings times when you do less talking and more listening.

_____ Listen most to soldiers who are squared away and who command the respect of other soldiers.

_____ Listen to soldiers who are willing to express their opinions before a group.



C12. You are a company commander, and there has been an ongoing problem in your unit with alcoholism and especially with soldiers driving under the influence of alcohol. Two soldiers in the unit who previously had bad problems have since joined Alcoholics Anonymous groups and are now recovered. One other soldier is now in jail because of a car accident he caused while intoxicated which resulted in the death of a civilian. You are extremely concerned about this ongoing problem, and you would like to do something to get through to the soldiers about its seriousness and impact upon your unit. What should you do?

_____ Regularly pull a soldier out of formation, at random, and ask him/her to speak to the unit about why driving under the influence is a bad idea.

_____ Encourage soldiers to form their own informal peer support group to combat alcoholism.

_____ Provide incentives to soldiers for going three consecutive weeks without drinking and for other milestones of good behavior.

_____ Present in detail the story of the soldier who is now in jail to the whole unit.

_____ Have the reformed alcoholics give presentations stating how they beat their problem to drum up peer support.

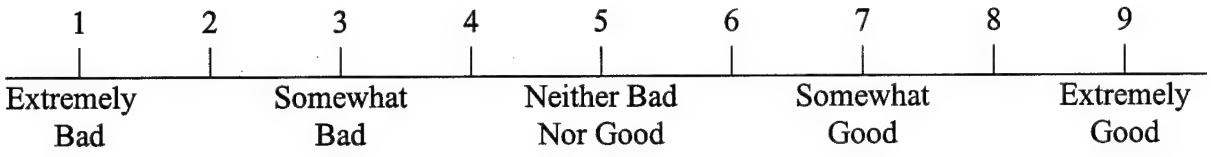
_____ Use different approaches from day to day when you talk to the troops about the problem--for example, one day mention the soldier who is in jail; the next day mention the success of the Alcoholics Anonymous groups.

_____ Prepare an analysis of what driving under the influence costs a soldier in lost pay and fines, and make this information readily available to all soldiers.

_____ Conduct frequent health and welfare inspections to search for alcohol.

_____ Call in Alcoholics Anonymous sponsors to give a talk about the dangers of alcoholism.

_____ Be tough on the soldiers: Threaten the most extreme punishment possible for even the slightest infraction of the rules.



C13. You are a company commander with some relatively junior lieutenants. Your goal is to develop these lieutenants. Rate the quality of the following strategies for achieving your goal.

_____ Involve the lieutenants in every administrative action in the company.

_____ Beginning early on, encourage the lieutenants to determine their own goals, and use this information during counseling sessions.

_____ Involve the lieutenants only in those decisions that affect their platoons.

_____ Explain the big picture to the lieutenants regarding upcoming missions.

_____ When going on a mission, explain only their portion to the lieutenants.

_____ Tell the lieutenants when things in the battalion are bothering you.

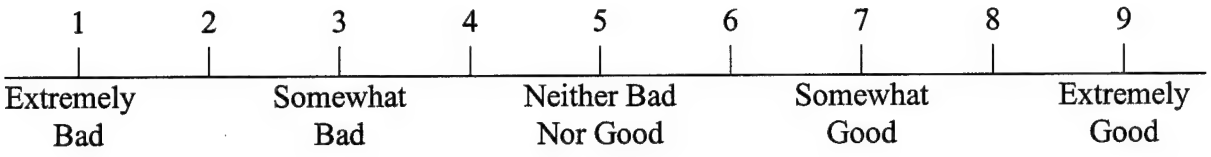
_____ Involve the lieutenants in administrative activities only with soldiers from their own platoon.

_____ Don't share ideas with the lieutenants; make your own decisions and implement them.

_____ Have the lieutenants present for administrative punishments (Article 15s, etc.) only if their schedules allow it.

_____ Start a professional development program to assist the lieutenants in their growth.

_____ Involve the lieutenants in all decisions.



C14. You are a company commander. You have a platoon leader who is causing you problems. Once he was cleaning his weapon on the mail loading dock and he pointed it at a civilian. Another time he was late to a range. He frequently argues with you and does not do what you ask him to do. This is a new problem for your first sergeant--he has never experienced this situation before. The behaviors are continuing and growing in severity to a point where the lieutenant is insubordinate. What should you do?

_____ If a relatively severe instance of insubordinate behavior occurs in public, shift the focus and avoid humiliating the platoon leader in public, but have him see you one-on-one later on.

_____ Use all assets available to you--but do not involve your boss (the battalion commander).

_____ Deal with the situation immediately--do not let it fester.

_____ Counsel the platoon leader only when his/her performance warrants it.

_____ Ask the battalion commander to give him a letter of reprimand.

_____ If a severe instance of insubordinate behavior occurs in public, dismiss the platoon leader from the room and deal with him later.

_____ Before taking action, find out if the platoon leader has been counseled before for his bad behavior.

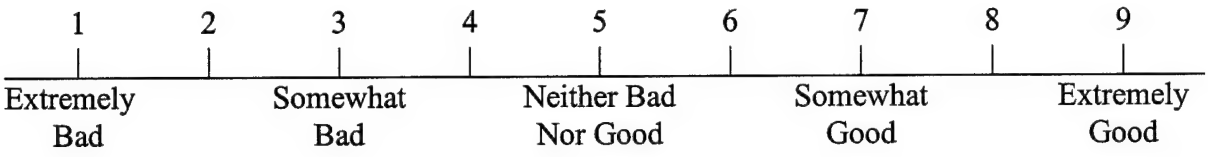
_____ Talk with the platoon leader and work out the problem.

_____ Establish regular sessions during which you counsel the platoon leader about his performance.

_____ To prepare for counseling sessions, get together with your first sergeant and role play various scenarios for dealing with the platoon leader including his potential reactions to your actions.

_____ Wait awhile to see if the situation improves on its own.

_____ If an instance of insubordinate behavior occurs between the two of you in private, immediately reprimand the platoon leader.



C15. You are a company commander, and your battalion commander often gives directives that you believe are unreasonable. You have tried to give your commander input regarding these directives, but he has not listened to your input. The NCOs and soldiers also feel these orders are unreasonable, and the situation is causing you considerable stress. You have generally lost respect for the battalion commander. He gives you another order you believe is unreasonable. What should you do?

_____ Speak to the sergeant major and see if she/he will use her/his influence with the battalion commander to improve the situation.

_____ Let your key subordinates know this is not your directive but rather the commander's.

_____ Do your best to gain the NCOs' and soldiers' compliance by explaining the rationale for the commander's orders, being as convincing as you can be.

_____ Go alone to the battalion commander and tell him/her you believe the order is unreasonable.

_____ Keep trying to give your battalion commander input regarding his unreasonable directives.

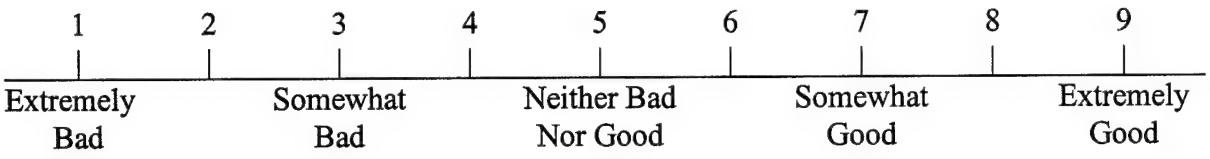
_____ Represent the orders as your own to your key subordinates.

_____ Say that the system is to blame for the unreasonable order.

_____ Let your soldiers know that this is not your directive but rather the commander's.

_____ Assign the unreasonable order a lower priority and accomplish it in the manner you choose.

_____ Get your key leaders together and go as a group to the battalion commander and say that the order is unreasonable.



C16. You are a company commander with both military and civilian personnel in your unit. You have no E5 sergeants--instead, you have civilians doing supervisory jobs with soldiers working under them. You are experiencing problems in maintaining group cohesion: For example, civilians see soldiers taking off for training and wonder why they have to keep working; soldiers see civilians getting cash awards for good performance and wonder why they can't have similar awards; and so on. You must deal with these problems to keep your unit running smoothly. What should you do?

_____ Try to develop cohesion separately in the civilians and military members by having separate social functions.

_____ Educate the soldiers and the civilians about the differing requirements of their jobs: Tell your soldiers that they have contractual obligations and they must accept their situation; tell the civilians that their situation is different from the soldiers' situation.

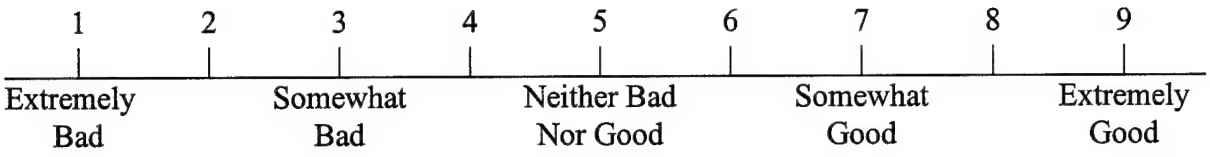
_____ Have both civilian and military members of the unit draw up a poster of your organization (an organization chart) and post it where everyone can see it.

_____ Form a morale committee composed of both civilian and military personnel to plan company social functions.

_____ Create a sign-out roster, and have people sign out when they leave their place of duty, stating where exactly they are going and why.

_____ Study your own procedures to ensure that you are being fair and equitable to both the civilian and the military personnel.

_____ Schedule outings, pot luck dinners, parties, and dining outs that include all members of the unit and their families.



C17. You are a company commander, and your unit is dispersed and is assigned to various garrison commands. Thus, you cannot possibly exercise direct control over your troops. The garrison commanders have non-judicial authority over your soldiers. You want to develop a good relationship with the garrison commanders. What should you do to take care of your soldiers under these conditions?

_____ Talk to the garrison commanders whenever there is a problem with one of your subordinate leaders.

_____ Visit the local garrison commanders on a regular basis.

_____ Request extra resources (and do what you can to expedite the request) to help the garrison commanders provide for your soldiers, if necessary.

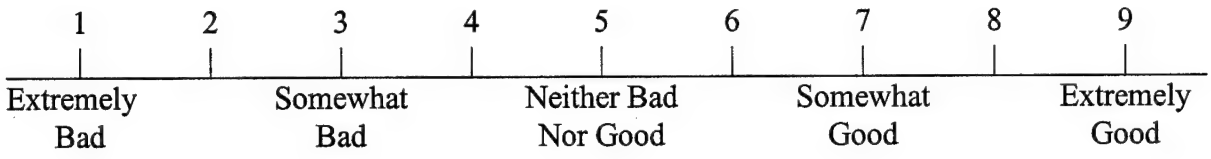
_____ Have your boss contact the garrison commanders to inquire about soldier support issues.

_____ Do not talk to the garrison commanders unless one of your subordinate leaders comes to you and tells you that there is a problem.

_____ Coordinate with the garrison commanders whenever possible to ensure that your soldiers' needs are being met.

_____ Speak to your soldiers individually as often as you can to check up on how they are being treated.

_____ Check with the garrison commanders about the quality of support being provided to your soldiers.



C18. You are a company commander, and you believe that you have an incompetent battalion commander. This incompetence is both technical and tactical. Often this person issues directives that are not going to achieve the mission. What should you do?

_____ Infer the underlying intent of the directive, go to your commander, and inform him of your interpretation of the underlying intent and the steps being taken to achieve this intent.

_____ When provided with the next unworkable directive, go back to the commander immediately and try to help direct the commander's thinking onto more appropriate and workable solutions.

_____ Use your first sergeant to help you develop ways to make the directive work well and look good to the troops.

_____ Speak to the sergeant major and the executive officer, ask for any relevant information, and listen to their opinions.

_____ Confront the commander and provide specific examples of why his directives are incompetent.

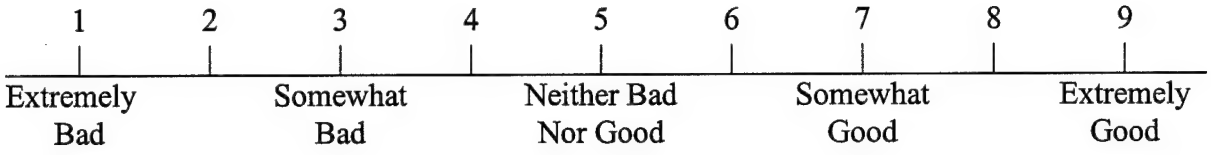
_____ Speak to the brigade commander about the problem, arming yourself with specific examples of incompetent directives.

_____ Continue to follow directives and let the chips fall where they may.

_____ Explain to your subordinates that the battalion commander does not understand the area in question because it is not his primary specialty.

_____ Infer the underlying intent of the directive and develop your own strategy to solve the problem and achieve the mission.

_____ Communicate the battalion commander's intent (rather than his specific directive) and ensure that it is met.



C19. You are a company commander on deployment. Your unit is sustaining continuous operations. You are feeling the stress of the many demands upon your time, but you want to maintain your mental effectiveness and readiness. What should you do?

_____ Sleep.

_____ Take time alone each day to read inspirational books or materials.

_____ Use your peers as a sounding board and support group.

_____ Maintain contact with family and friends back home to keep you centered and remind you there's more to life than your job.

_____ Take time alone each day to think, regroup, and work through what's on your mind.

_____ Keep perspective by remembering that you have other talents and skills that are not related to your current job.

_____ Work as hard and as fast as you can: Have as your goal getting to tomorrow's work as soon as possible.

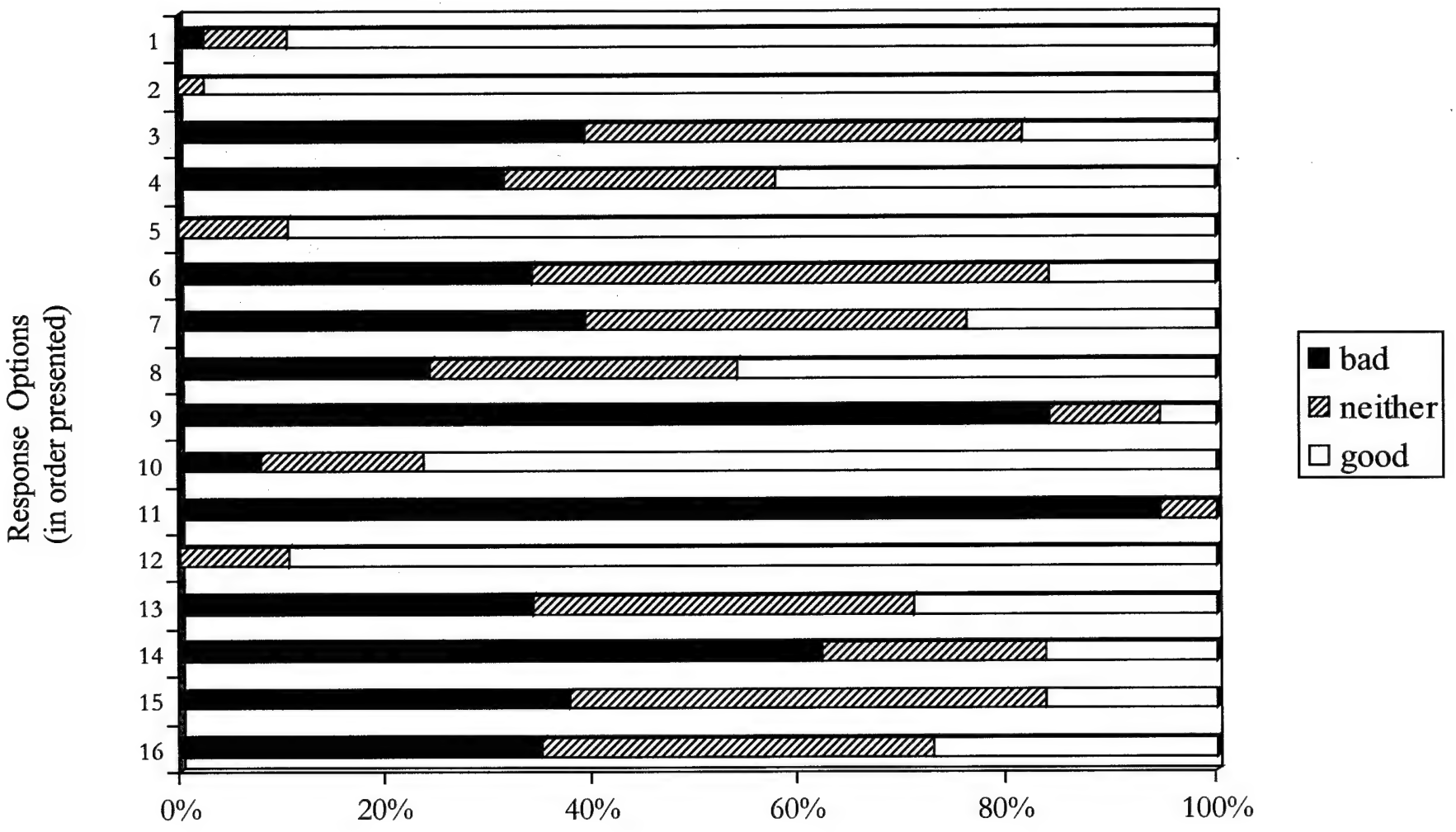
_____ Mentor or counsel troubled soldiers regularly to keep your own problems in perspective.

_____ Each day, reflect on your successes and on what you can do better in the future--maintain a positive focus.

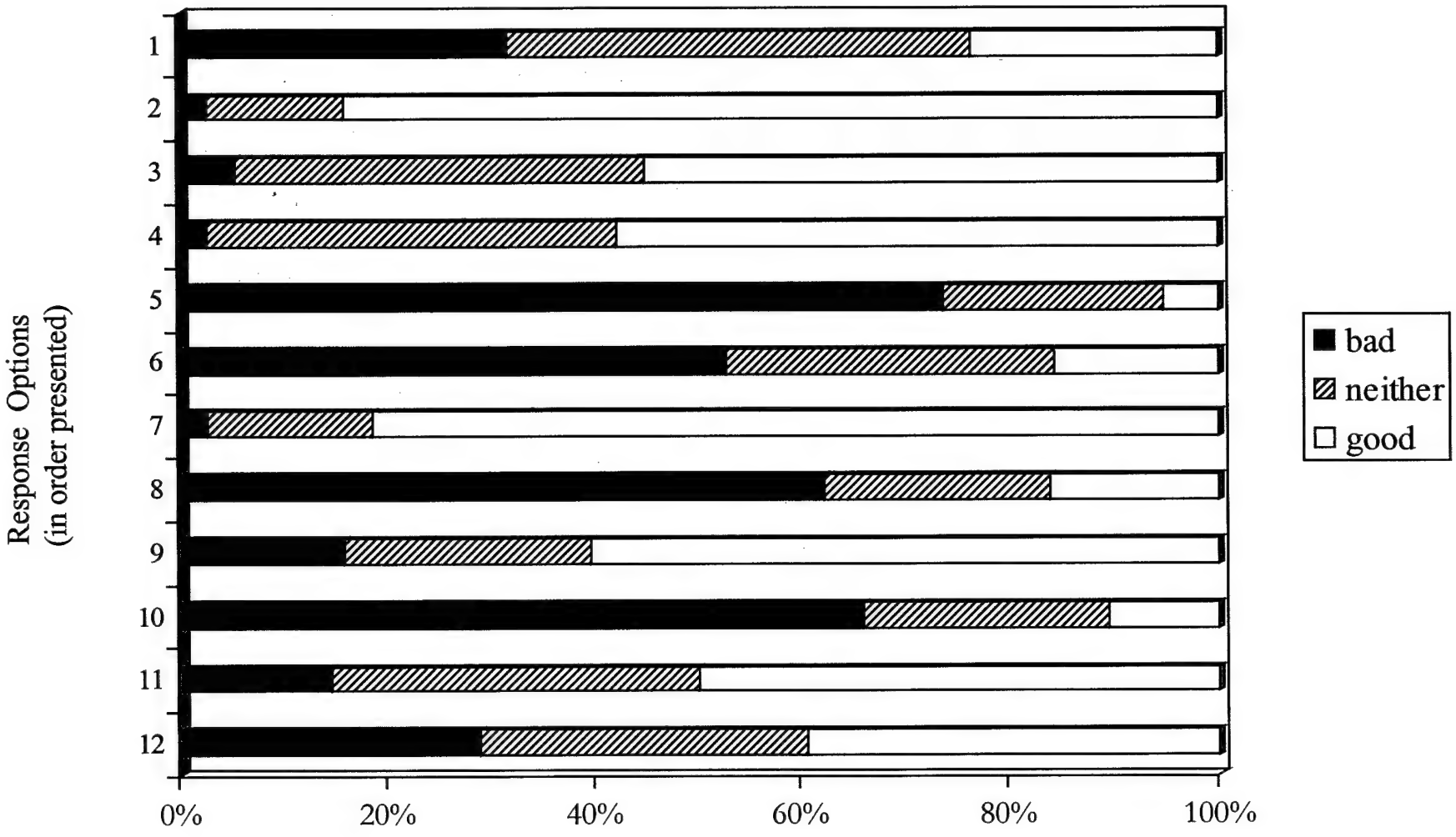
APPENDIX B

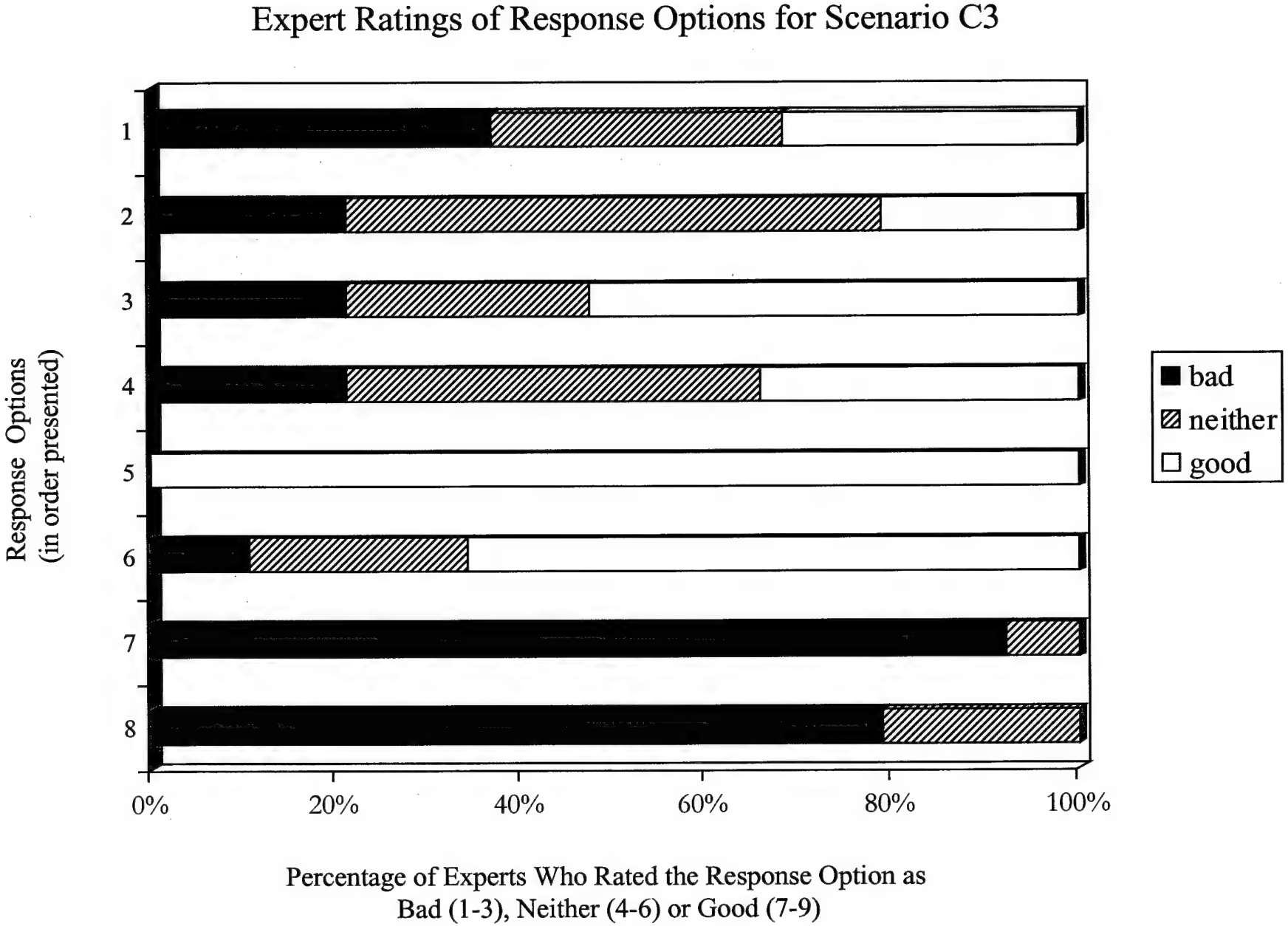
EXPERT RATINGS FOR COMPANY COMMANDER QUESTIONNAIRE

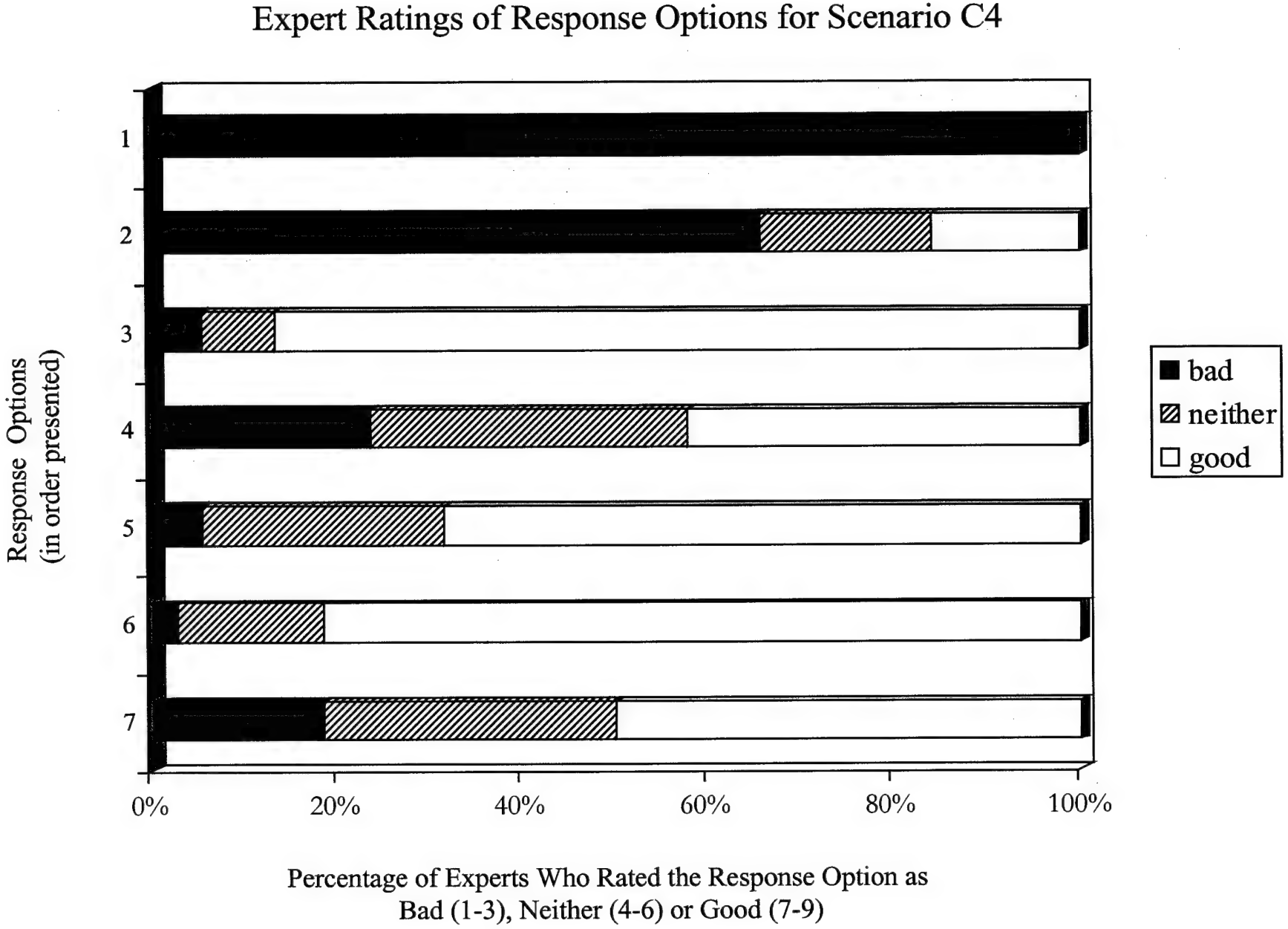
Expert Ratings of Response Options for Scenario C1

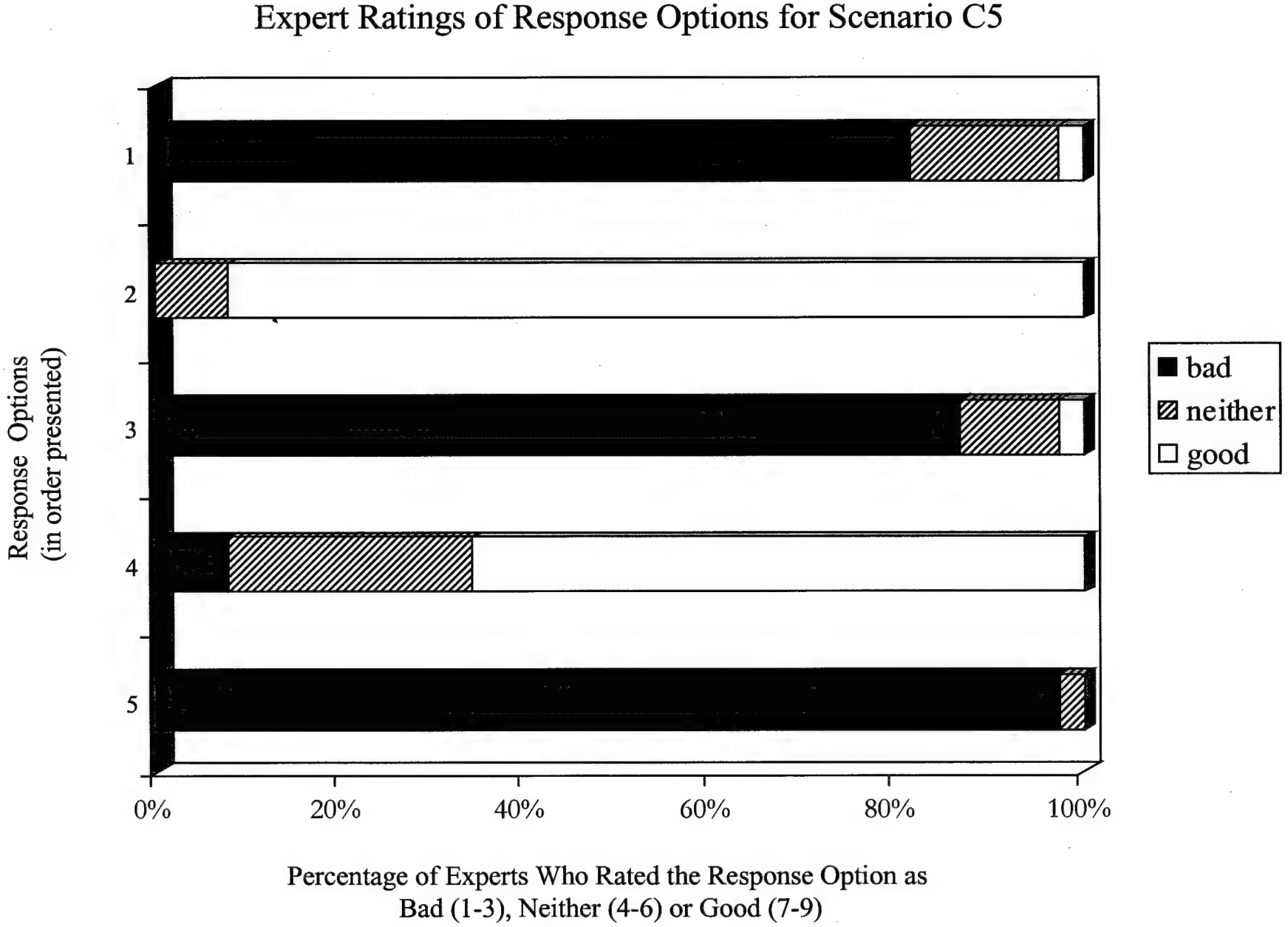


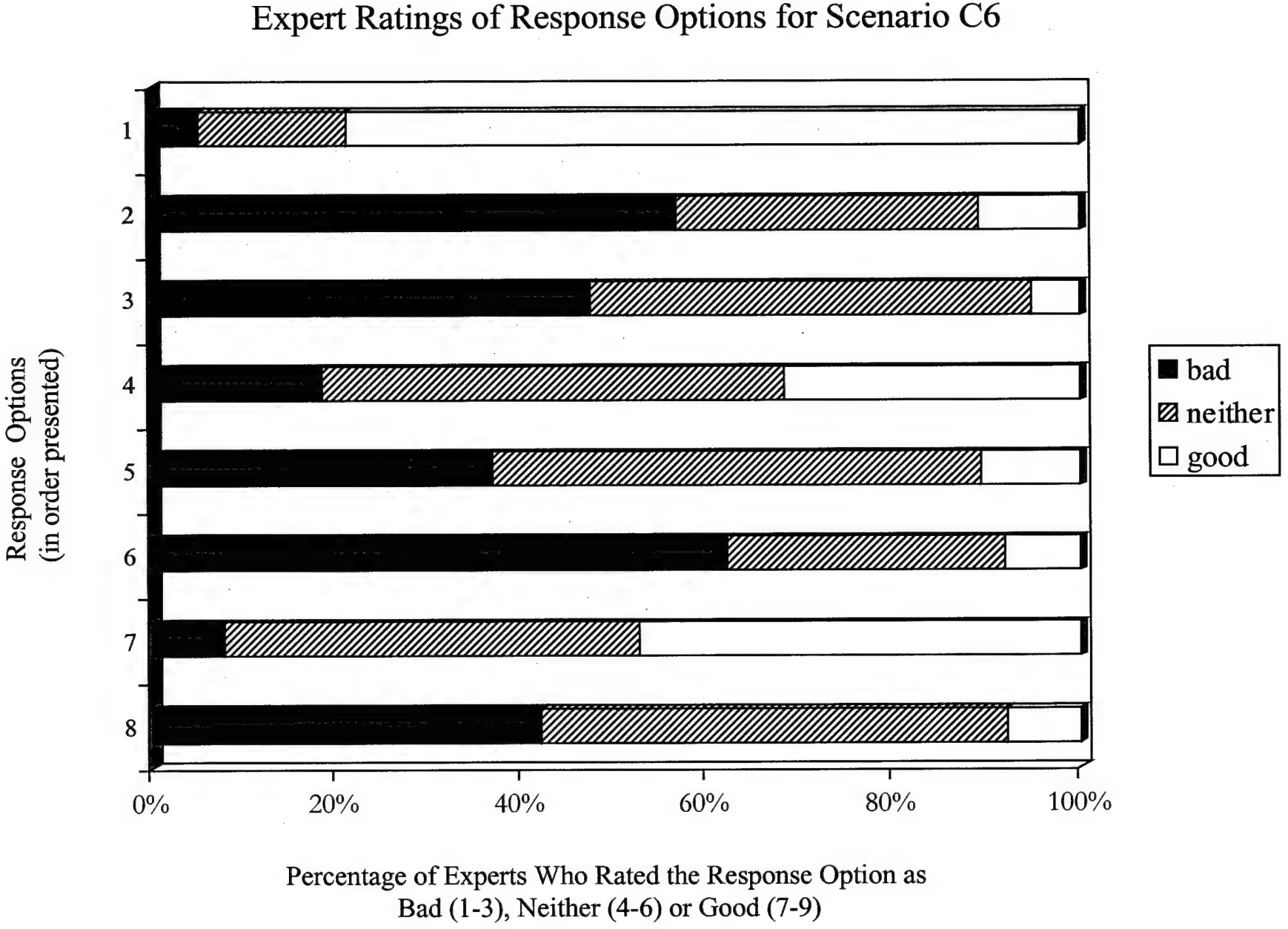
Expert Ratings of Response Options for Scenario C2

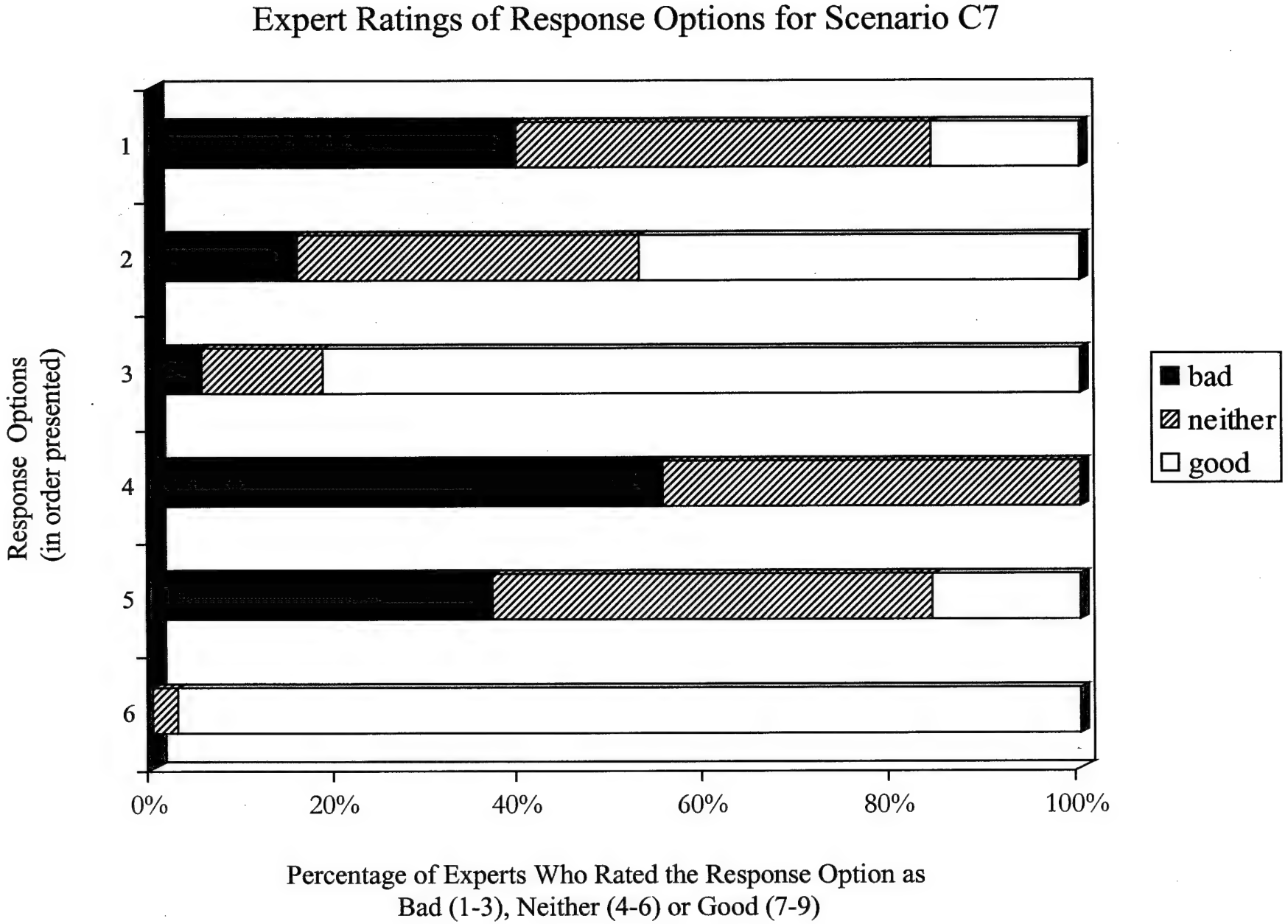


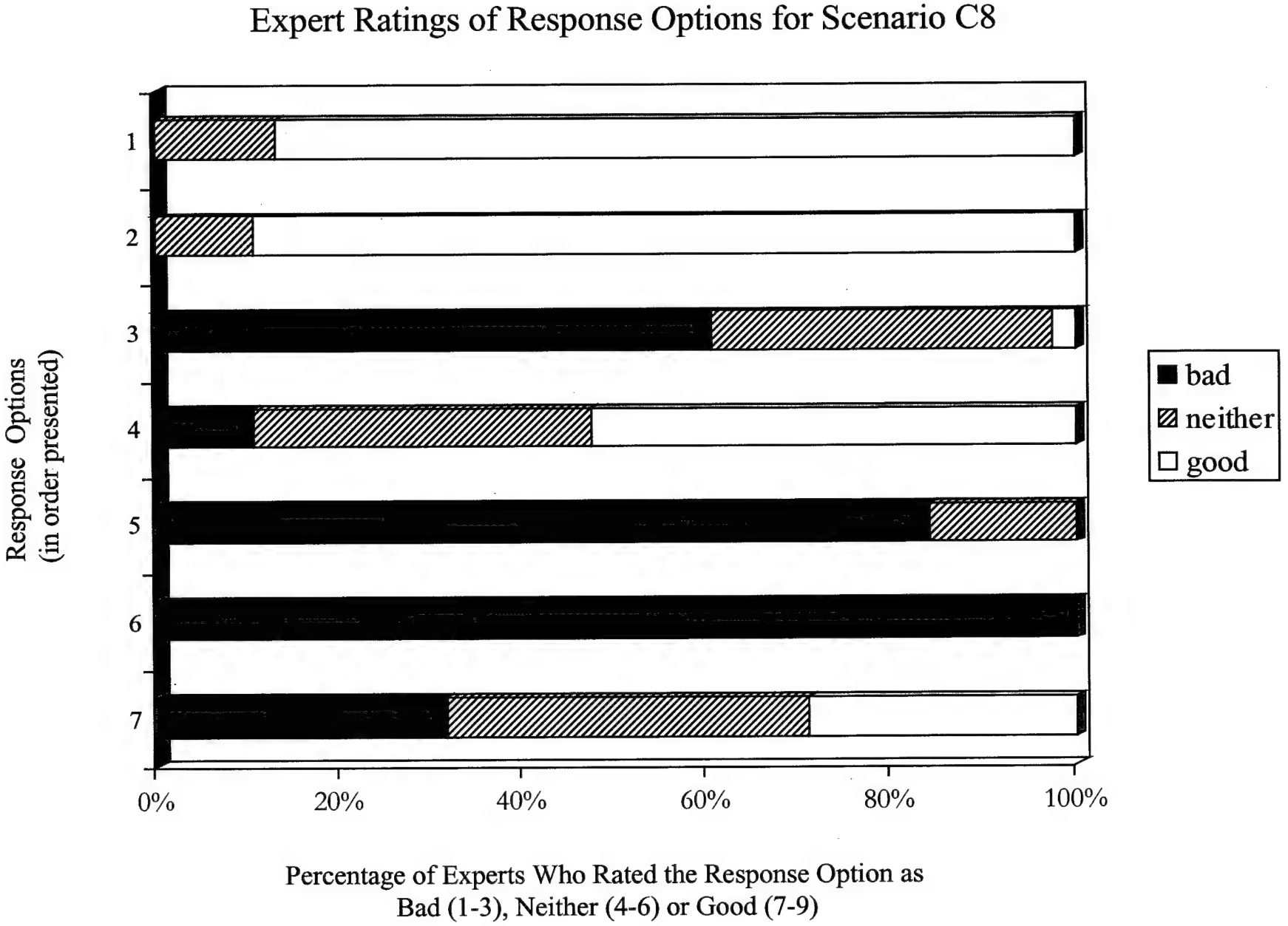

Expert Ratings of Response Options for Scenario C3
Response Options
(in order presented)
1
2
3
4
5
6
7
8
0%
20%
40%
60%
80%
100%
bad
neither
good
Percentage of Experts Who Rated the Response Option as
Bad (1-3), Neither (4-6) or Good (7-9)


Expert Ratings of Response Options for Scenario C4
Response Options
(in order presented)
1
2
3
4
5
6
7
0%
20%
40%
60%
80%
100%
bad
neither
good
Percentage of Experts Who Rated the Response Option as
Bad (1-3), Neither (4-6) or Good (7-9)

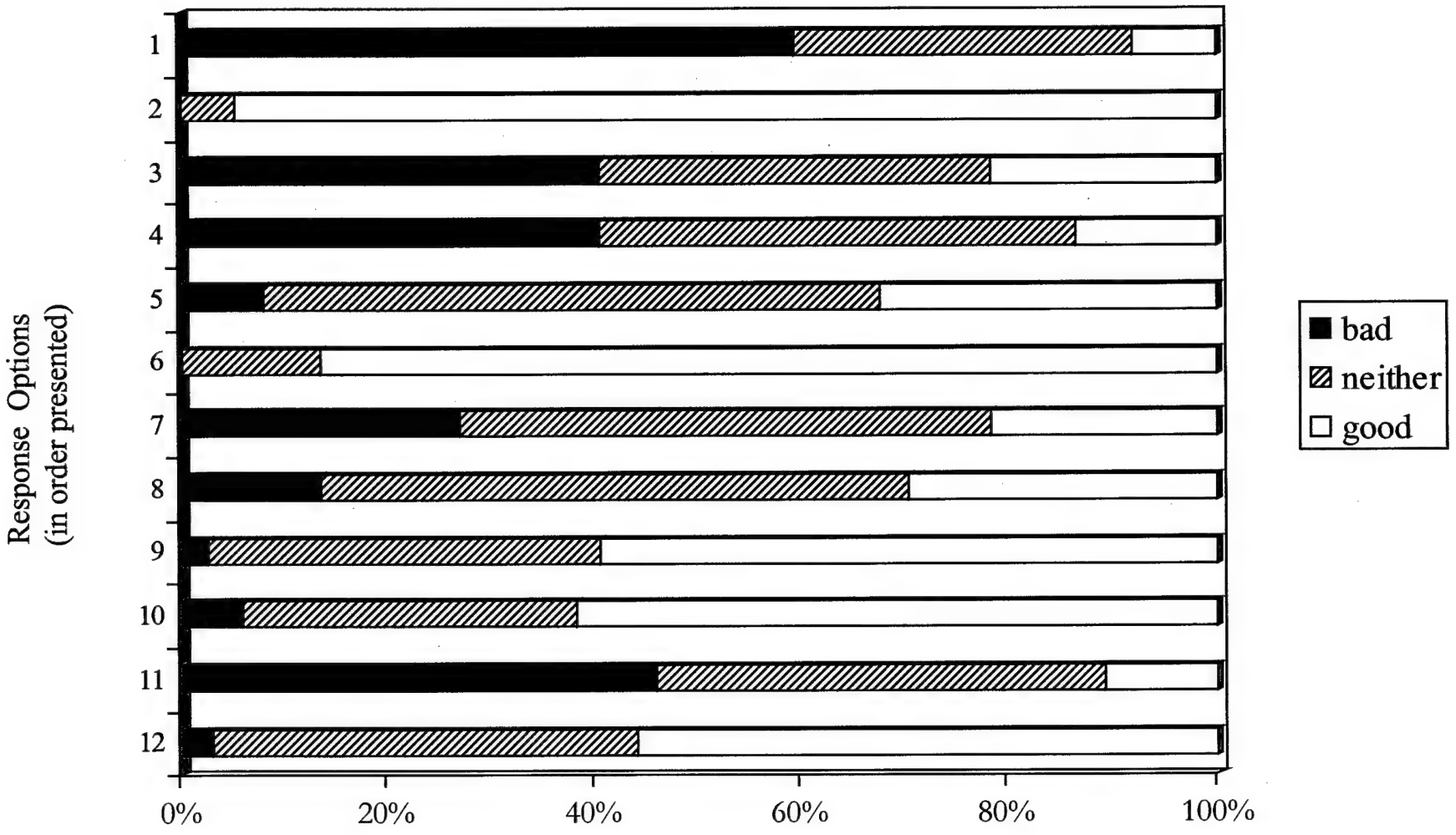

Expert Ratings of Response Options for Scenario C5
Response Options
(in order presented)
1
2
3
4
5
0%
20%
40%
60%
80%
100%
bad
neither
good
Percentage of Experts Who Rated the Response Option as
Bad (1-3), Neither (4-6) or Good (7-9)

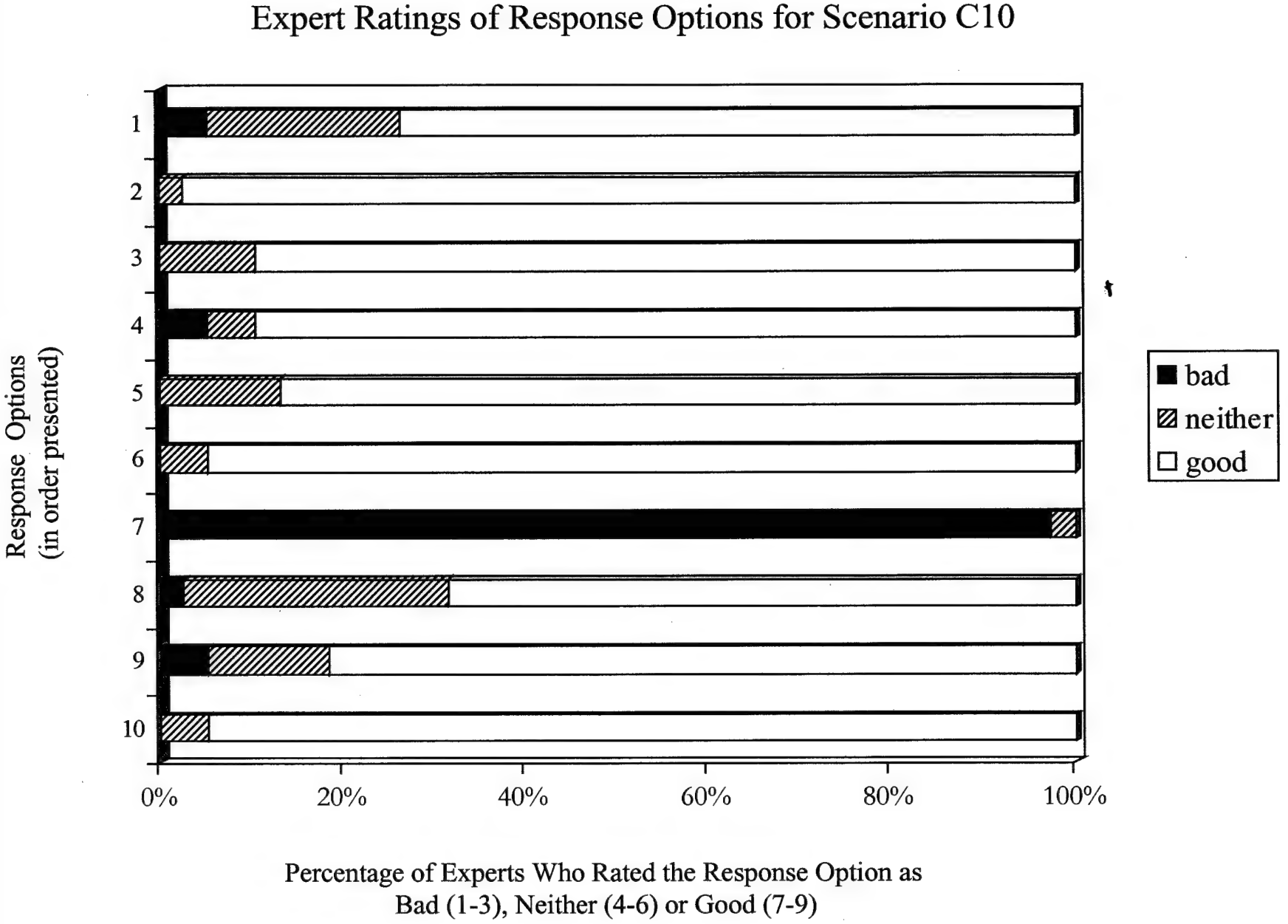

Expert Ratings of Response Options for Scenario C6
Response Options
(in order presented)
1
2
3
4
5
6
7
8
0%
20%
40%
60%
80%
100%
bad
neither
good
Percentage of Experts Who Rated the Response Option as
Bad (1-3), Neither (4-6) or Good (7-9)

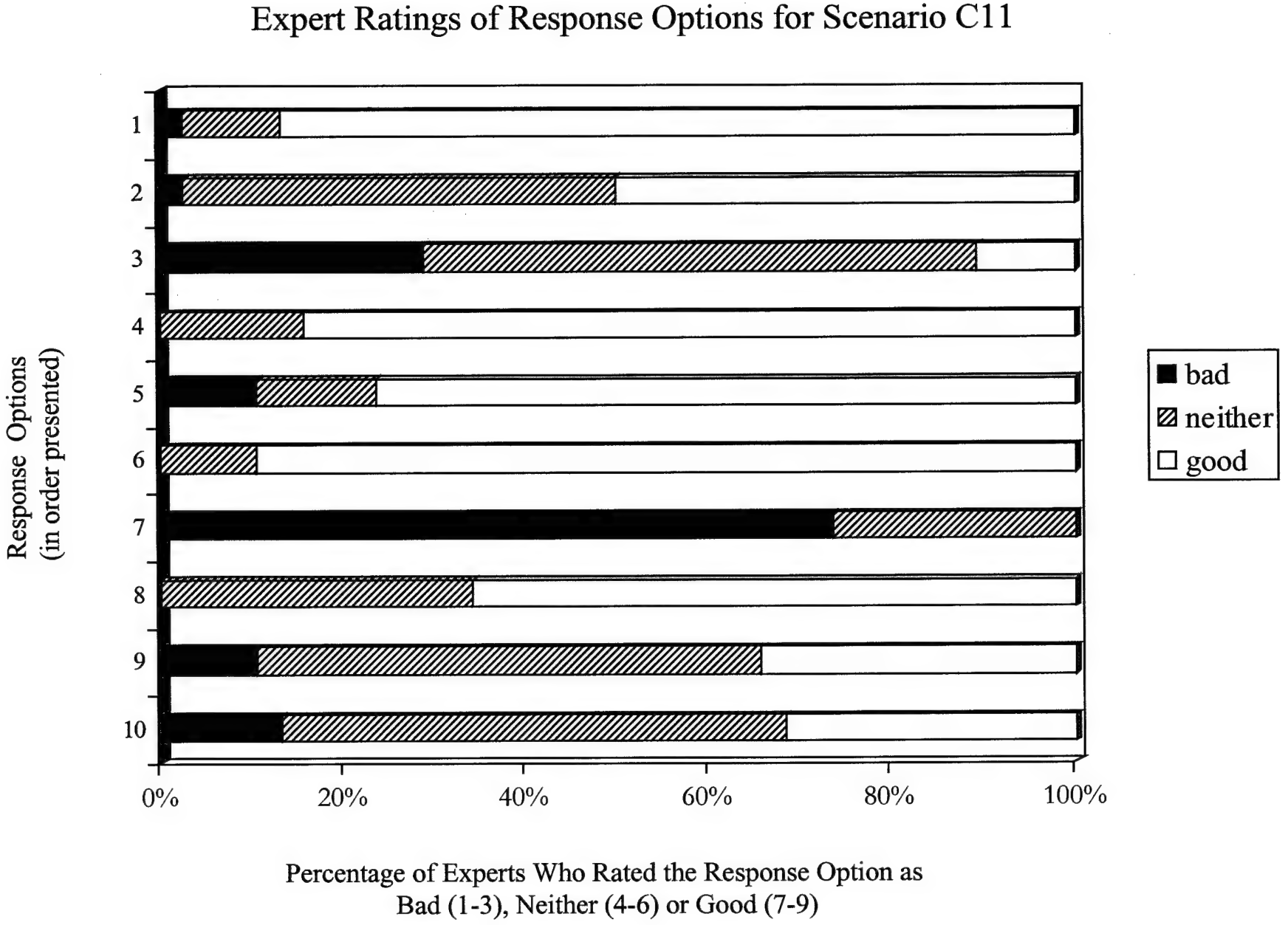

Expert Ratings of Response Options for Scenario C7
Response Options
(in order presented)
1
2
3
4
5
6
0%
20%
40%
60%
80%
100%
bad
neither
good
Percentage of Experts Who Rated the Response Option as
Bad (1-3), Neither (4-6) or Good (7-9)


Expert Ratings of Response Options for Scenario C8
Response Options
(in order presented)
1
2
3
4
5
6
7
0%
20%
40%
60%
80%
100%
bad
neither
good
Percentage of Experts Who Rated the Response Option as
Bad (1-3), Neither (4-6) or Good (7-9)

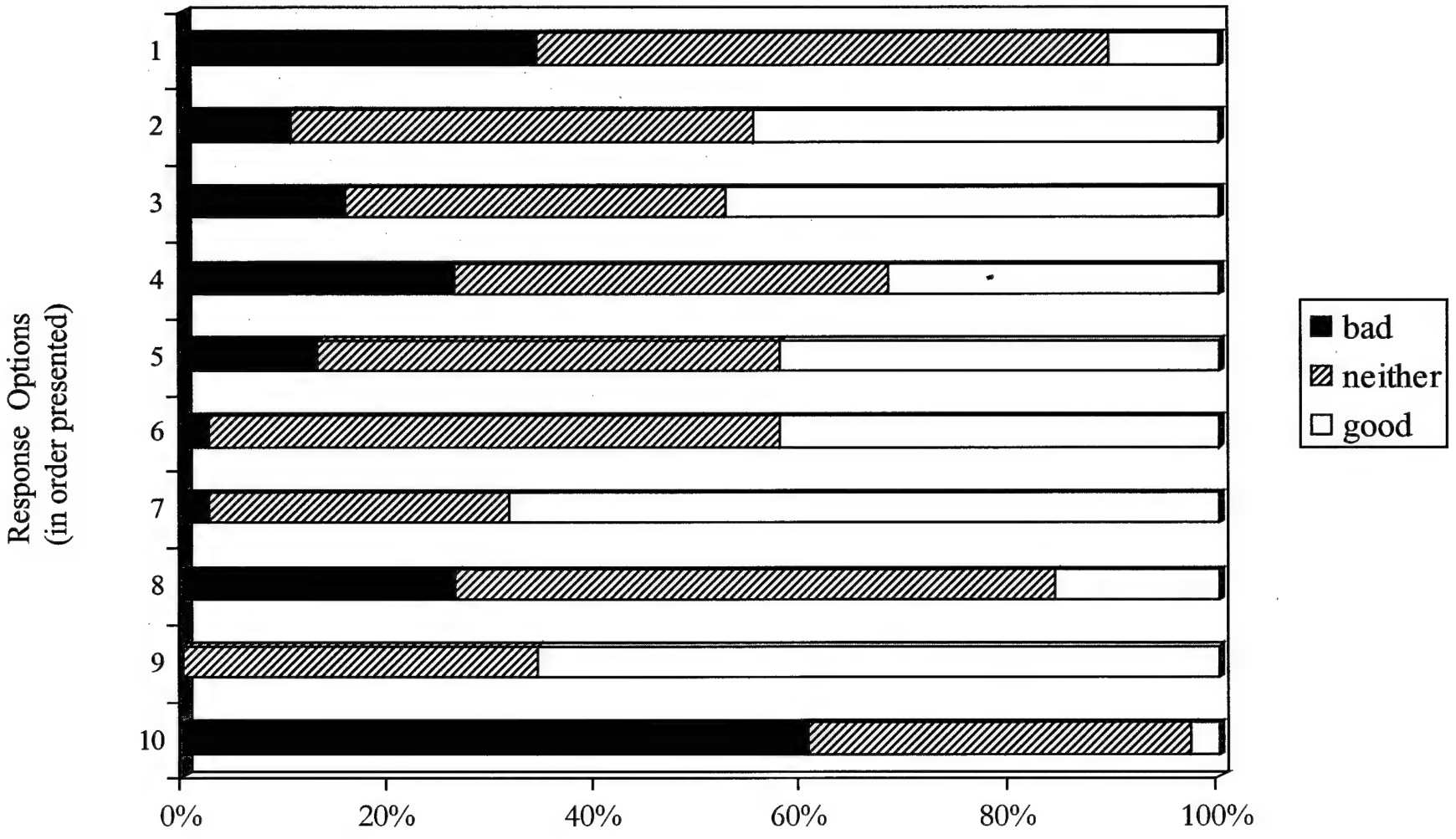
Expert Ratings of Response Options for Scenario C9



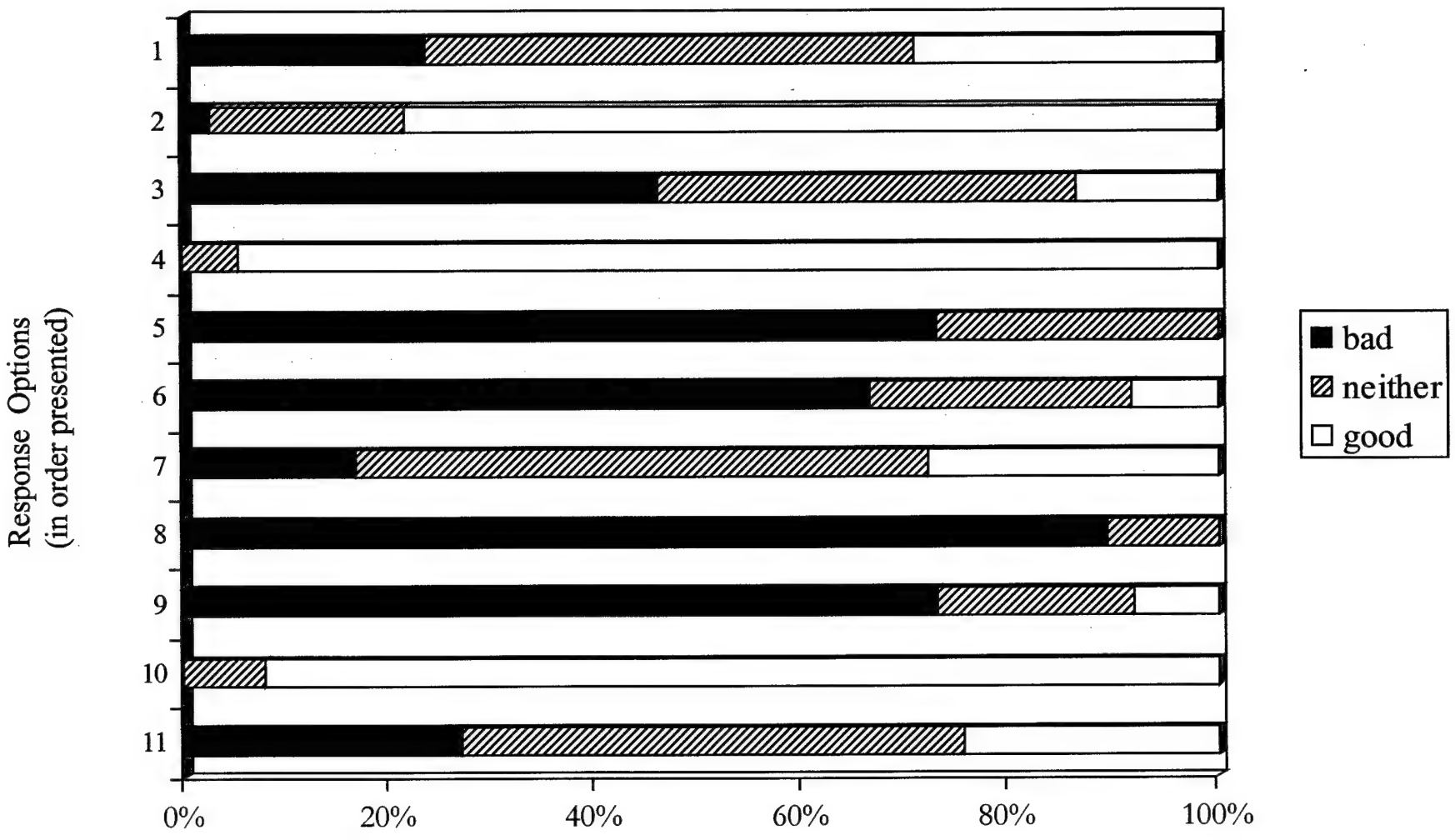

Expert Ratings of Response Options for Scenario C10
Response Options
(in order presented)
1
2
3
4
5
6
7
8
9
10
0%
20%
40%
60%
80%
100%
bad
neither
good
Percentage of Experts Who Rated the Response Option as
Bad (1-3), Neither (4-6) or Good (7-9)


Expert Ratings of Response Options for Scenario C11
Response Options
(in order presented)
1
2
3
4
5
6
7
8
9
10
0%
20%
40%
60%
80%
100%
bad
neither
good
Percentage of Experts Who Rated the Response Option as
Bad (1-3), Neither (4-6) or Good (7-9)

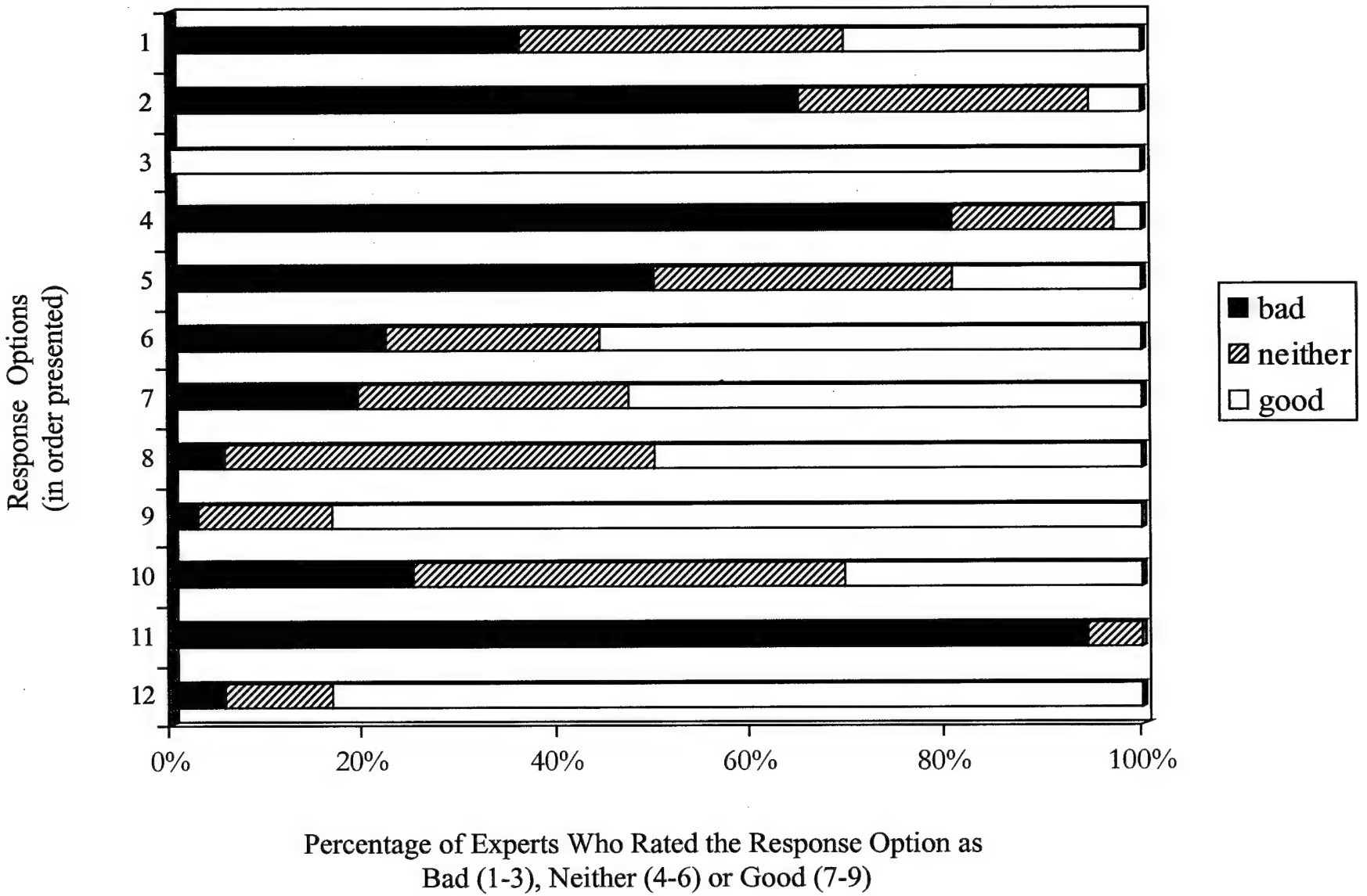
Expert Ratings of Response Options for Scenario C12



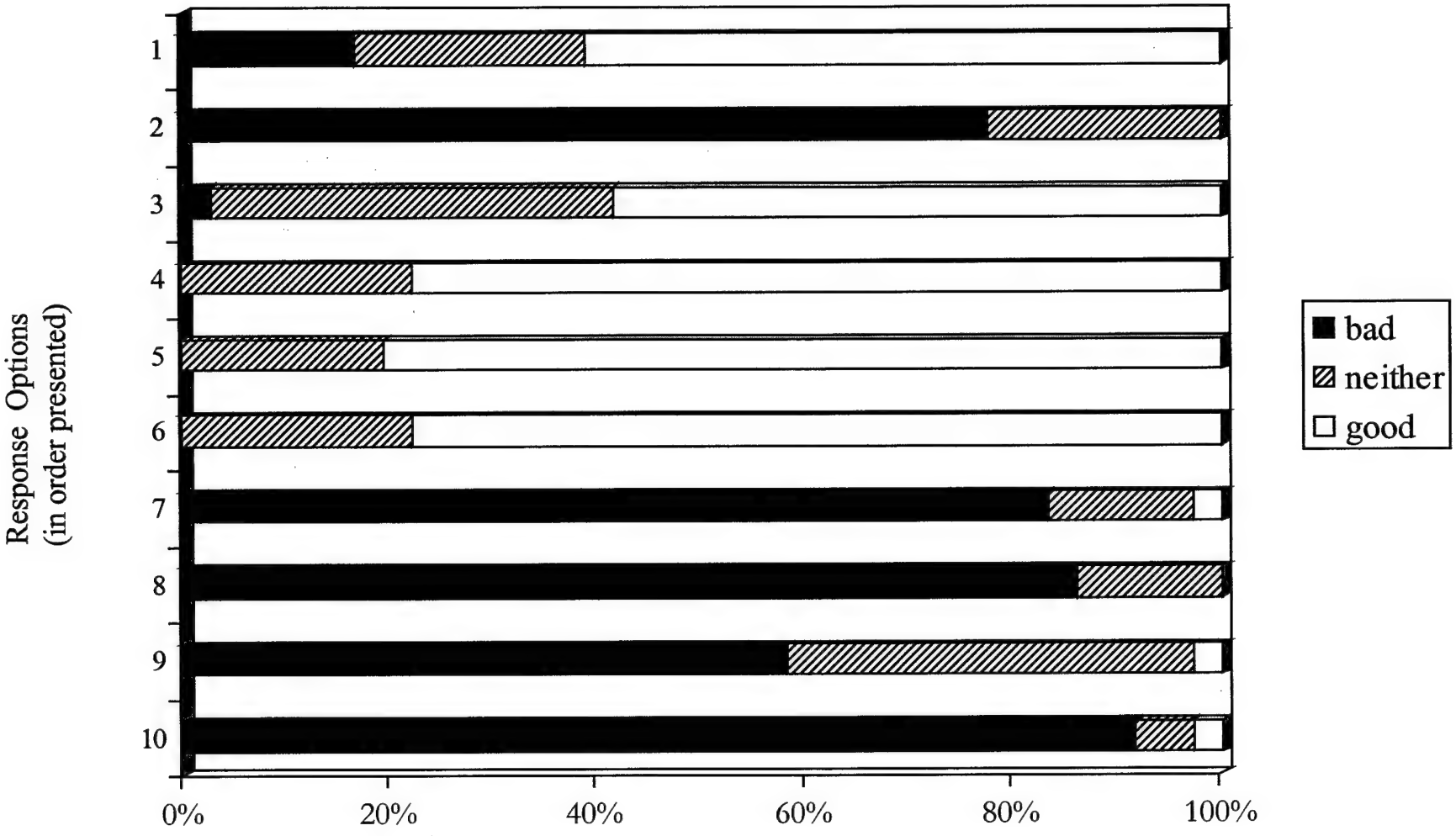
Expert Ratings of Response Options for Scenario C13

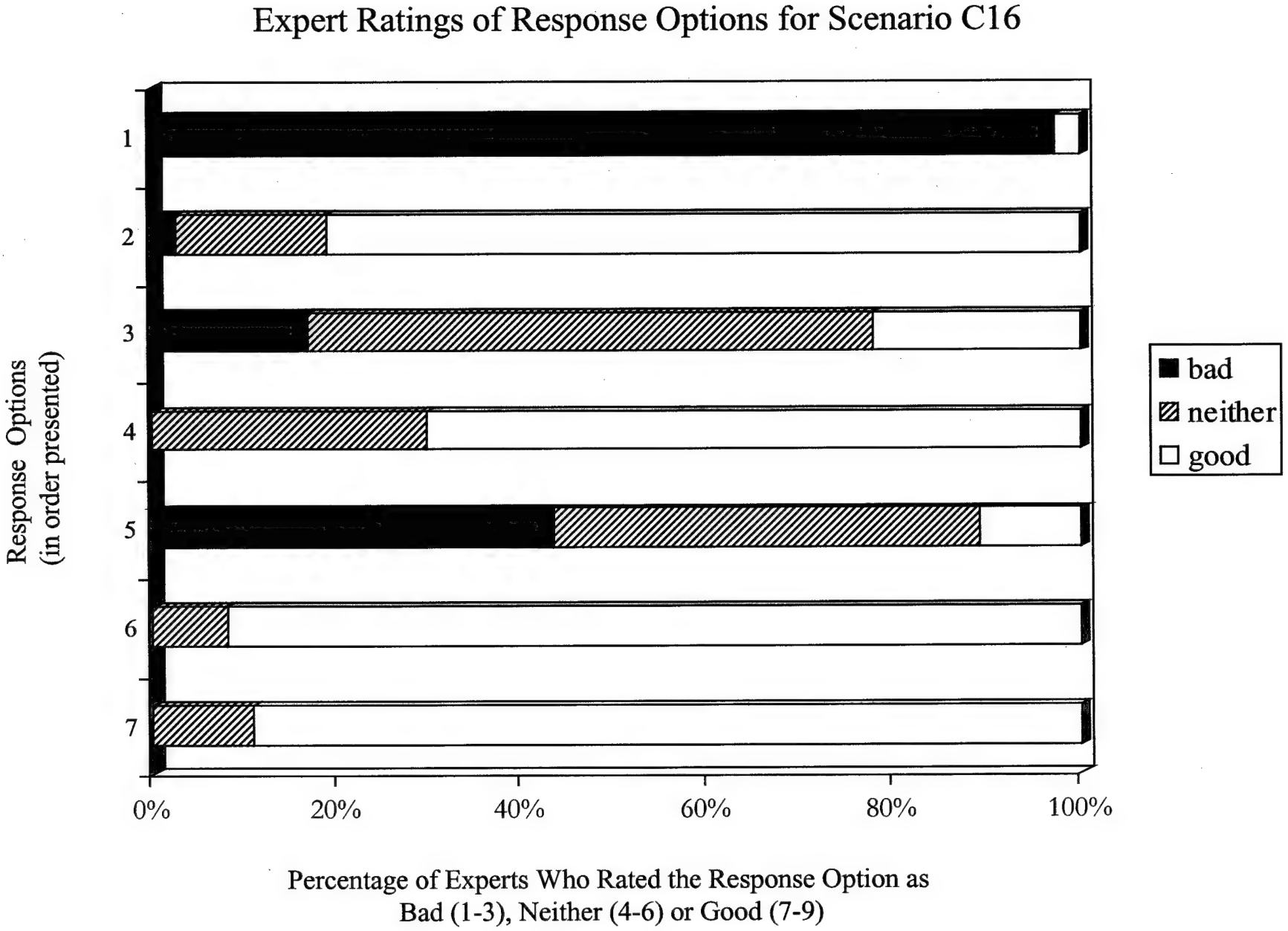


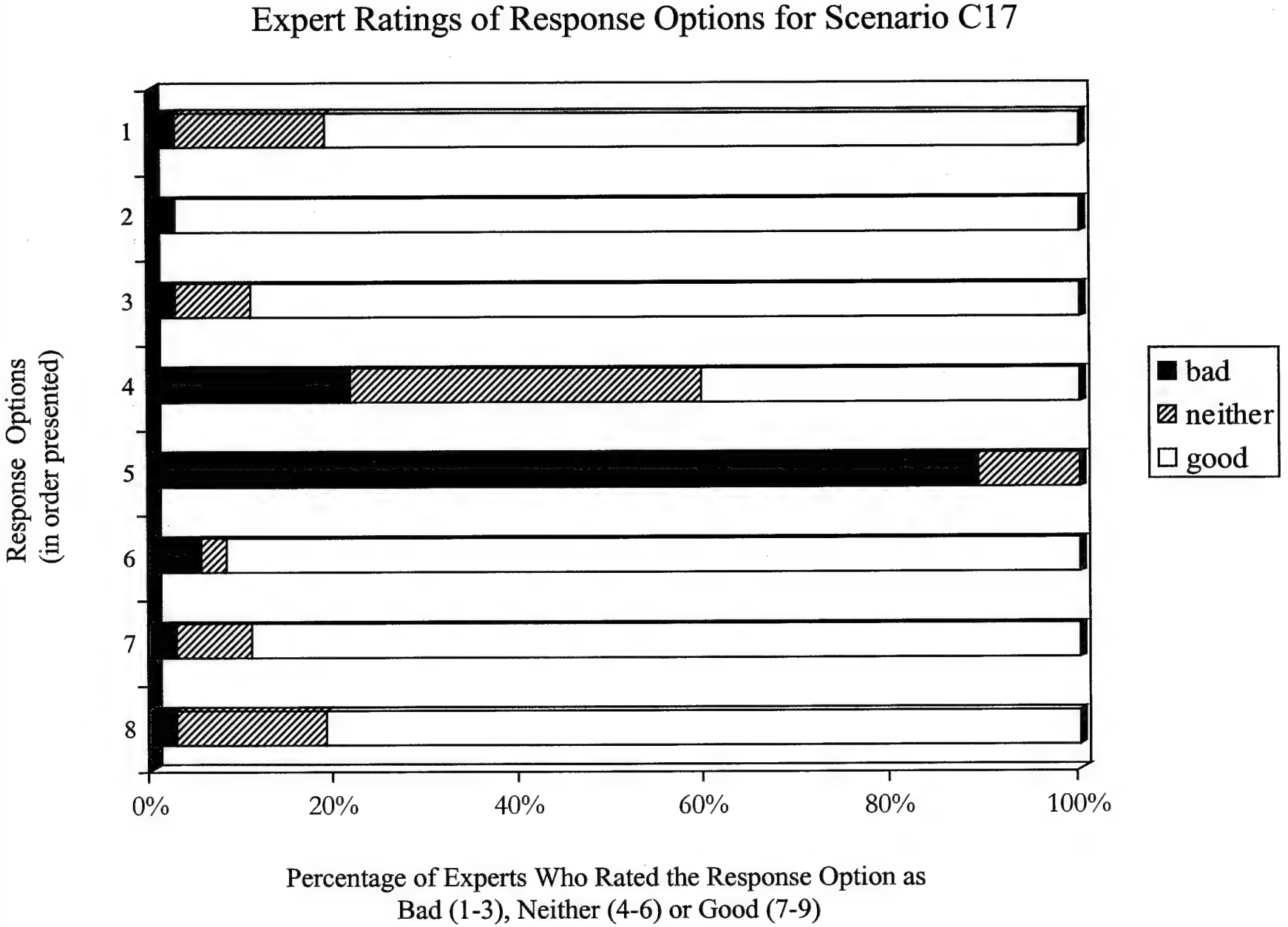
Expert Ratings of Response Options for Scenario C14



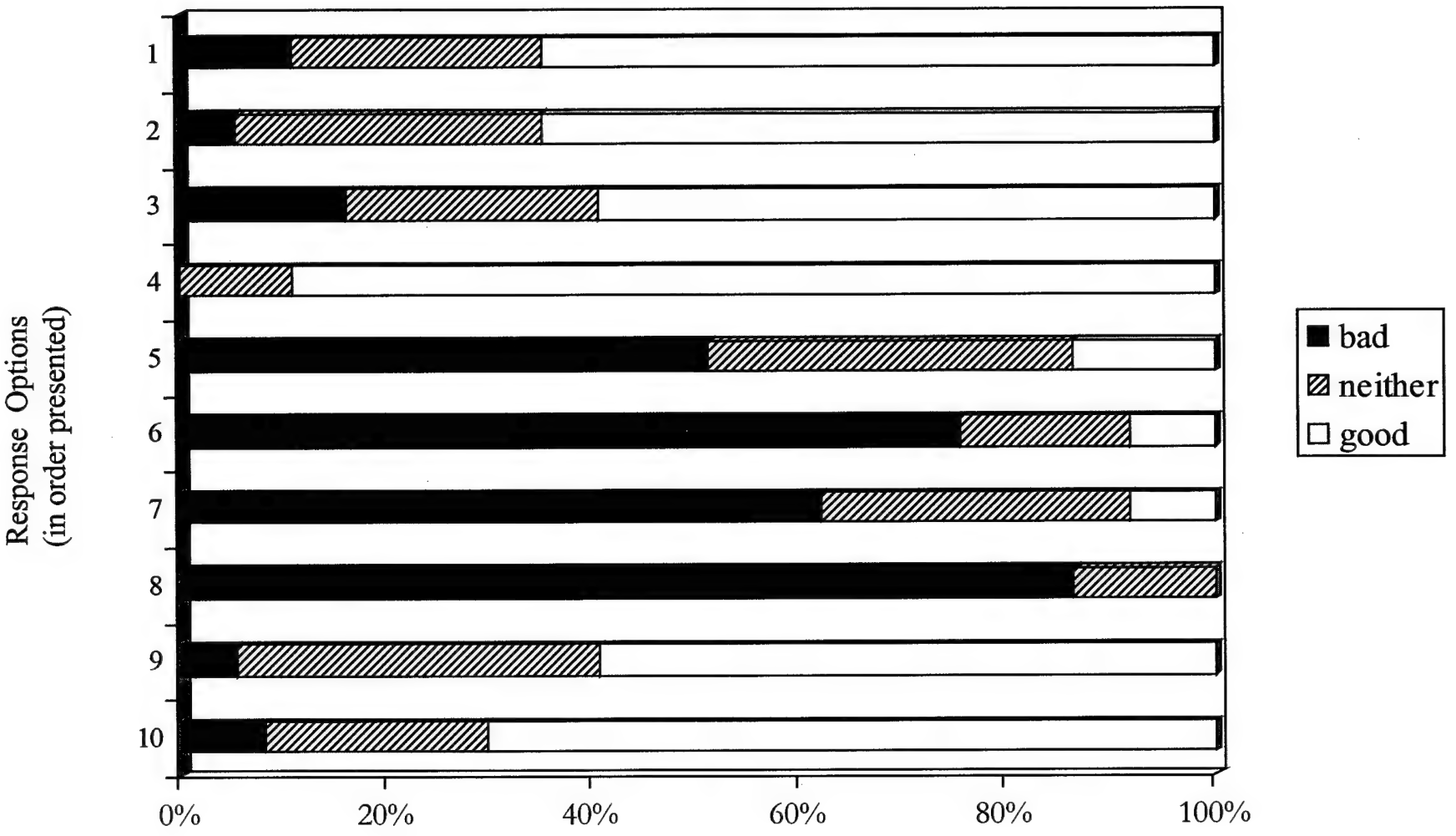
Expert Ratings of Response Options for Scenario C15



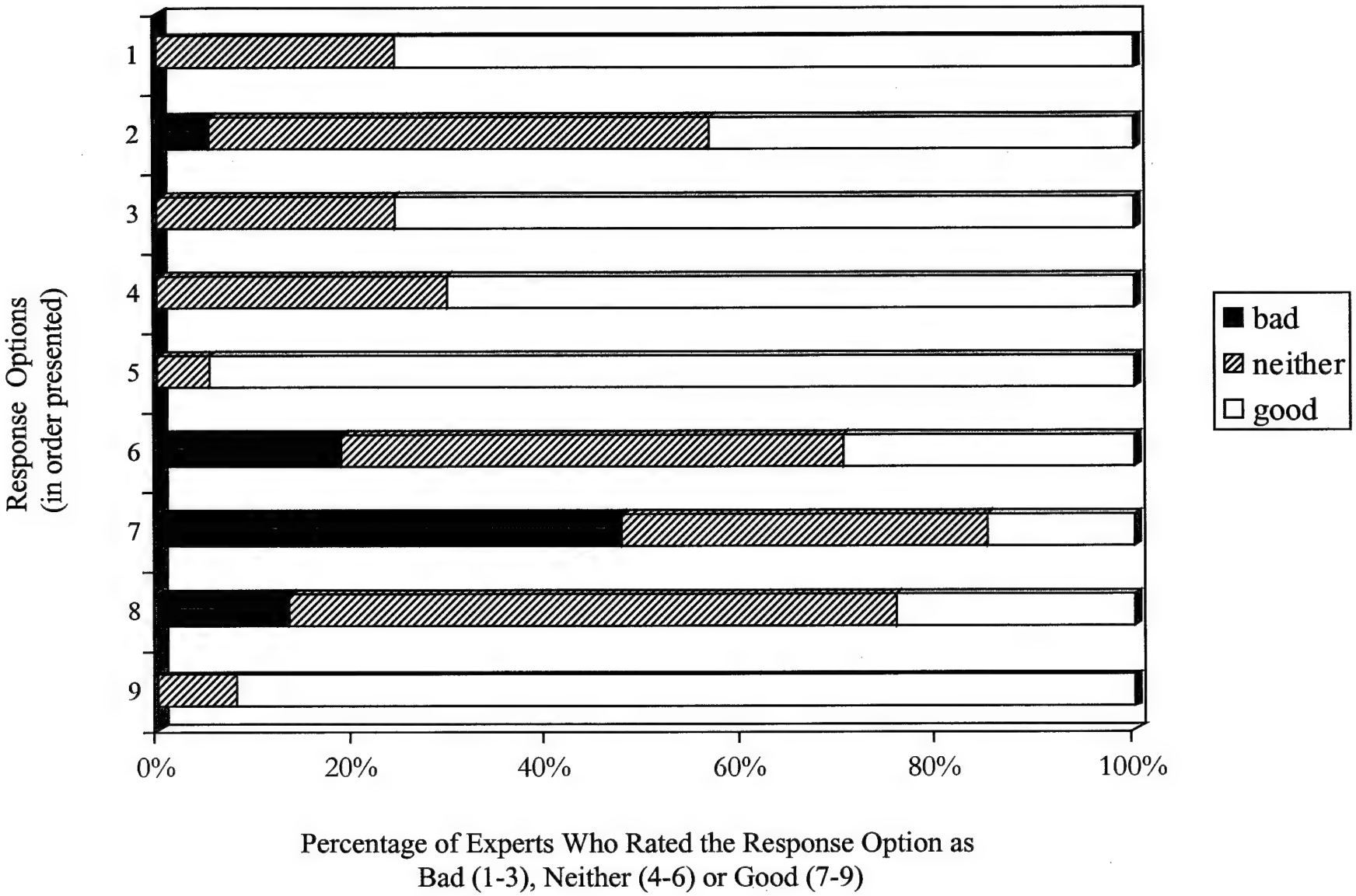

Expert Ratings of Response Options for Scenario C16
Response Options
(in order presented)
1
2
3
4
5
6
7
0%
20%
40%
60%
80%
100%
bad
neither
good
Percentage of Experts Who Rated the Response Option as
Bad (1-3), Neither (4-6) or Good (7-9)


Expert Ratings of Response Options for Scenario C17
Response Options
(in order presented)
1
2
3
4
5
6
7
8
0%
20%
40%
60%
80%
100%
bad
neither
good
Percentage of Experts Who Rated the Response Option as
Bad (1-3), Neither (4-6) or Good (7-9)

Expert Ratings of Response Options for Scenario C18



Expert Ratings of Response Options for Scenario C19



APPENDIX C

ANSWER SHEETS FOR COMPANY COMMANDER QUESTIONNAIRE

Answer Sheet
Scenario C1

For each response option, record your answer in the first column. Then refer to the scoring chart for scenario C1. If your response falls within the confidence interval (white), record a "1" for your score on that response option. If your response falls outside the confidence interval (black), record a "0" for that response option. After scoring all options for a particular question, add up the points and record in the space provided.

Response	Answer	Score
1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____
5	_____	_____
6	_____	_____
7	_____	_____
8	_____	_____
9	_____	_____
10	_____	_____
11	_____	_____
12	_____	_____
13	_____	_____
14	_____	_____
15	_____	_____
16	_____	_____
Total		_____

Answer Sheet

Scenario C2

For each response option, record your answer in the first column. Then refer to the scoring chart for scenario C2. If your response falls within the confidence interval (white), record a "1" for your score on that response option. If your response falls outside the confidence interval (black), record a "0" for that response option. After scoring all options for a particular question, add up the points and record in the space provided.

Response	Answer	Score
1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____
5	_____	_____
6	_____	_____
7	_____	_____
8	_____	_____
9	_____	_____
10	_____	_____
11	_____	_____
12	_____	_____
Total		_____

Answer Sheet
Scenario C3

For each response option, record your answer in the first column. Then refer to the scoring chart for scenario C3. If your response falls within the confidence interval (white), record a "1" for your score on that response option. If your response falls outside the confidence interval (black), record a "0" for that response option. After scoring all options for a particular question, add up the points and record in the space provided.

Response	Answer	Score
1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____
5	_____	_____
6	_____	_____
7	_____	_____
8	_____	_____
Total		_____

Answer Sheet
Scenario C4

For each response option, record your answer in the first column. Then refer to the scoring chart for scenario C4. If your response falls within the confidence interval (white), record a "1" for your score on that response option. If your response falls outside the confidence interval (black), record a "0" for that response option. After scoring all options for a particular question, add up the points and record in the space provided.

Response	Answer	Score
1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____
5	_____	_____
6	_____	_____
7	_____	_____
Total		_____

Answer Sheet
Scenario C5

For each response option, record your answer in the first column. Then refer to the scoring chart for scenario C5. If your response falls within the confidence interval (white), record a "1" for your score on that response option. If your response falls outside the confidence interval (black), record a "0" for that response option. After scoring all options for a particular question, add up the points and record in the space provided.

Response	Answer	Score
1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____
5	_____	_____
Total		_____

Answer Sheet
Scenario C6

For each response option, record your answer in the first column. Then refer to the scoring chart for scenario C6. If your response falls within the confidence interval (white), record a "1" for your score on that response option. If your response falls outside the confidence interval (black), record a "0" for that response option. After scoring all options for a particular question, add up the points and record in the space provided.

Response	Answer	Score
1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____
5	_____	_____
6	_____	_____
7	_____	_____
8	_____	_____
Total		_____

Answer Sheet
Scenario C7

For each response option, record your answer in the first column. Then refer to the scoring chart for scenario C7. If your response falls within the confidence interval (white), record a "1" for your score on that response option. If your response falls outside the confidence interval (black), record a "0" for that response option. After scoring all options for a particular question, add up the points and record in the space provided.

Response	Answer	Score
1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____
5	_____	_____
6	_____	_____
Total		_____

Answer Sheet
Scenario C8

For each response option, record your answer in the first column. Then refer to the scoring chart for scenario C8. If your response falls within the confidence interval (white), record a "1" for your score on that response option. If your response falls outside the confidence interval (black), record a "0" for that response option. After scoring all options for a particular question, add up the points and record in the space provided.

Response	Answer	Score
1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____
5	_____	_____
6	_____	_____
7	_____	_____
Total		_____

Answer Sheet
Scenario C9

For each response option, record your answer in the first column. Then refer to the scoring chart for scenario C9. If your response falls within the confidence interval (white), record a "1" for your score on that response option. If your response falls outside the confidence interval (black), record a "0" for that response option. After scoring all options for a particular question, add up the points and record in the space provided.

Response	Answer	Score
1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____
5	_____	_____
6	_____	_____
7	_____	_____
8	_____	_____
9	_____	_____
10	_____	_____
11	_____	_____
12	_____	_____
Total		_____

Answer Sheet
Scenario C10

For each response option, record your answer in the first column. Then refer to the scoring chart for scenario C10. If your response falls within the confidence interval (white), record a "1" for your score on that response option. If your response falls outside the confidence interval (black), record a "0" for that response option. After scoring all options for a particular question, add up the points and record in the space provided.

Response	Answer	Score
1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____
5	_____	_____
6	_____	_____
7	_____	_____
8	_____	_____
9	_____	_____
10	_____	_____
Total		_____

Answer Sheet
Scenario C11

For each response option, record your answer in the first column. Then refer to the scoring chart for scenario C11. If your response falls within the confidence interval (white), record a "1" for your score on that response option. If your response falls outside the confidence interval (black), record a "0" for that response option. After scoring all options for a particular question, add up the points and record in the space provided.

Response	Answer	Score
1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____
5	_____	_____
6	_____	_____
7	_____	_____
8	_____	_____
9	_____	_____
10	_____	_____
Total		_____

Answer Sheet
Scenario C12

For each response option, record your answer in the first column. Then refer to the scoring chart for scenario C12. If your response falls within the confidence interval (white), record a "1" for your score on that response option. If your response falls outside the confidence interval (black), record a "0" for that response option. After scoring all options for a particular question, add up the points and record in the space provided.

Response	Answer	Score
1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____
5	_____	_____
6	_____	_____
7	_____	_____
8	_____	_____
9	_____	_____
10	_____	_____
Total		_____

Answer Sheet
Scenario C13

For each response option, record your answer in the first column. Then refer to the scoring chart for scenario C13. If your response falls within the confidence interval (white), record a "1" for your score on that response option. If your response falls outside the confidence interval (black), record a "0" for that response option. After scoring all options for a particular question, add up the points and record in the space provided.

Response	Answer	Score
1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____
5	_____	_____
6	_____	_____
7	_____	_____
8	_____	_____
9	_____	_____
10	_____	_____
11	_____	_____
Total		_____

Answer Sheet
Scenario C14

For each response option, record your answer in the first column. Then refer to the scoring chart for scenario C14. If your response falls within the confidence interval (white), record a "1" for your score on that response option. If your response falls outside the confidence interval (black), record a "0" for that response option. After scoring all options for a particular question, add up the points and record in the space provided.

Response	Answer	Score
1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____
5	_____	_____
6	_____	_____
7	_____	_____
8	_____	_____
9	_____	_____
10	_____	_____
11	_____	_____
12	_____	_____
Total		_____

Answer Sheet
Scenario C15

For each response option, record your answer in the first column. Then refer to the scoring chart for scenario C15. If your response falls within the confidence interval (white), record a "1" for your score on that response option. If your response falls outside the confidence interval (black), record a "0" for that response option. After scoring all options for a particular question, add up the points and record in the space provided.

Response	Answer	Score
1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____
5	_____	_____
6	_____	_____
7	_____	_____
8	_____	_____
9	_____	_____
10	_____	_____
Total		_____

Answer Sheet
Scenario C16

For each response option, record your answer in the first column. Then refer to the scoring chart for scenario C16. If your response falls within the confidence interval (white), record a "1" for your score on that response option. If your response falls outside the confidence interval (black), record a "0" for that response option. After scoring all options for a particular question, add up the points and record in the space provided.

Response	Answer	Score
1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____
5	_____	_____
6	_____	_____
7	_____	_____
Total		_____

Answer Sheet
Scenario C17

For each response option, record your answer in the first column. Then refer to the scoring chart for scenario C17. If your response falls within the confidence interval (white), record a "1" for your score on that response option. If your response falls outside the confidence interval (black), record a "0" for that response option. After scoring all options for a particular question, add up the points and record in the space provided.

Response	Answer	Score
1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____
5	_____	_____
6	_____	_____
7	_____	_____
8	_____	_____
Total		_____

Answer Sheet
Scenario C18

For each response option, record your answer in the first column. Then refer to the scoring chart for scenario C18. If your response falls within the confidence interval (white), record a "1" for your score on that response option. If your response falls outside the confidence interval (black), record a "0" for that response option. After scoring all options for a particular question, add up the points and record in the space provided.

Response	Answer	Score
1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____
5	_____	_____
6	_____	_____
7	_____	_____
8	_____	_____
9	_____	_____
10	_____	_____
Total		_____

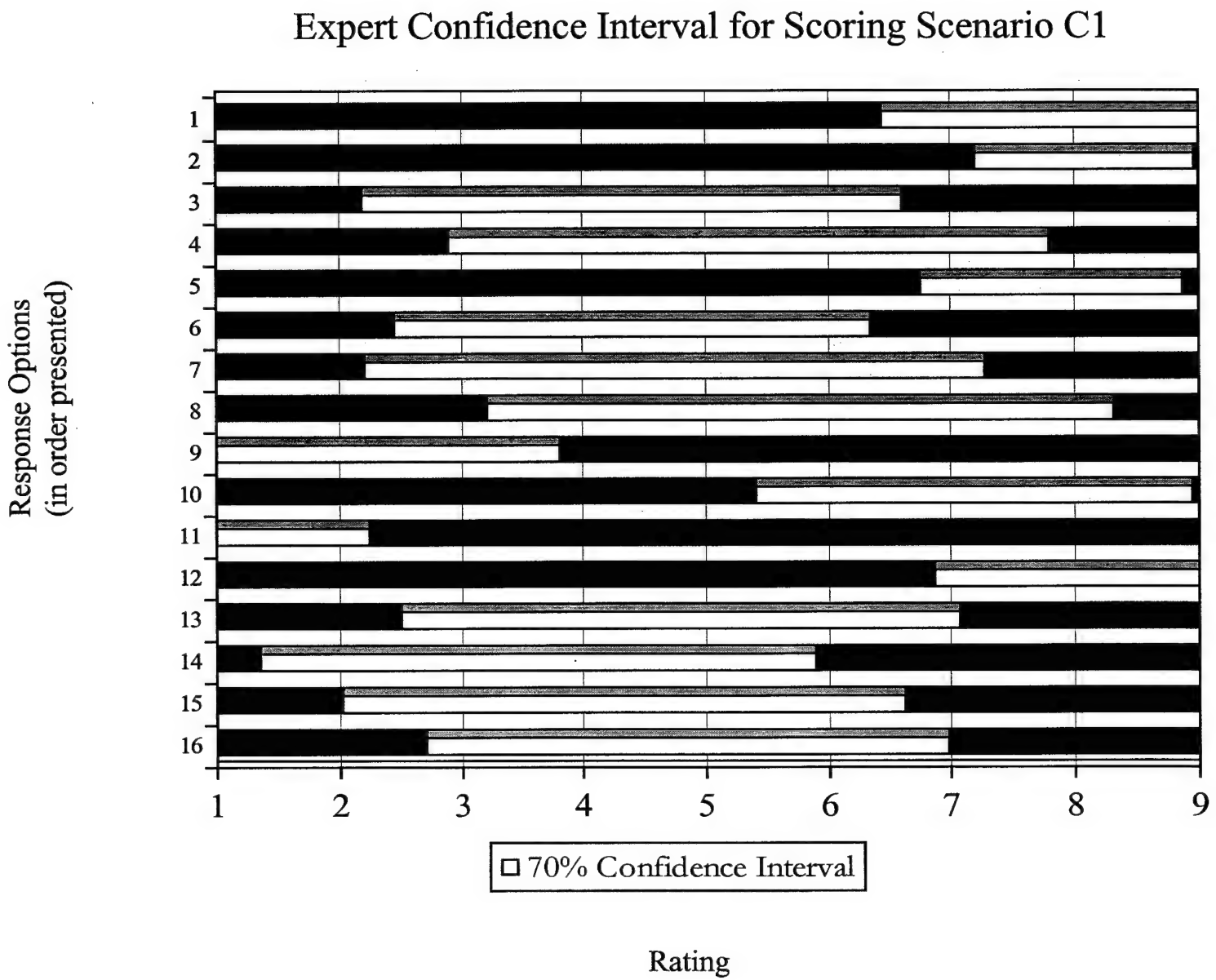
Answer Sheet
Scenario C19

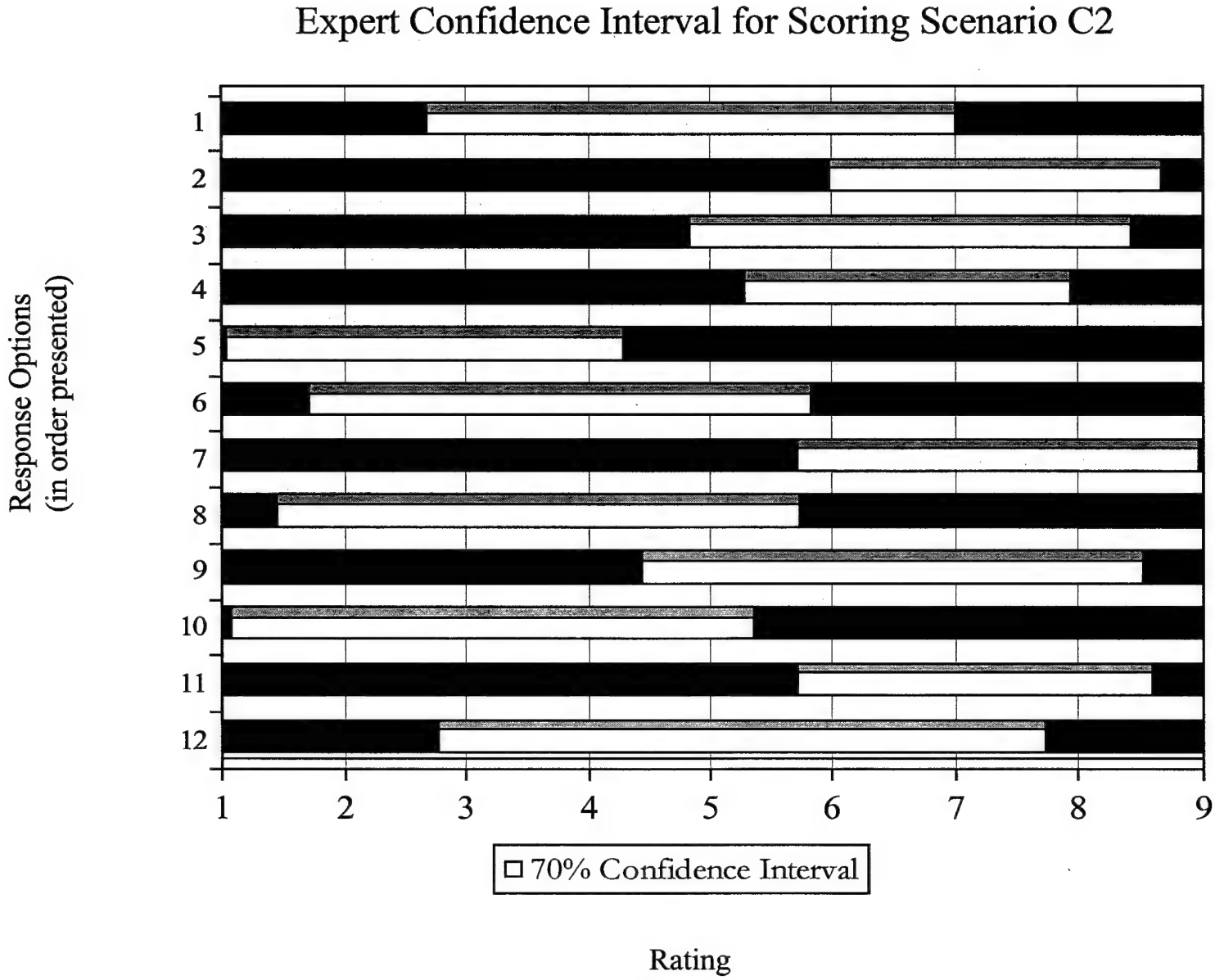
For each response option, record your answer in the first column. Then refer to the scoring chart for scenario C19. If your response falls within the confidence interval (white), record a "1" for your score on that response option. If your response falls outside the confidence interval (black), record a "0" for that response option. After scoring all options for a particular question, add up the points and record in the space provided.

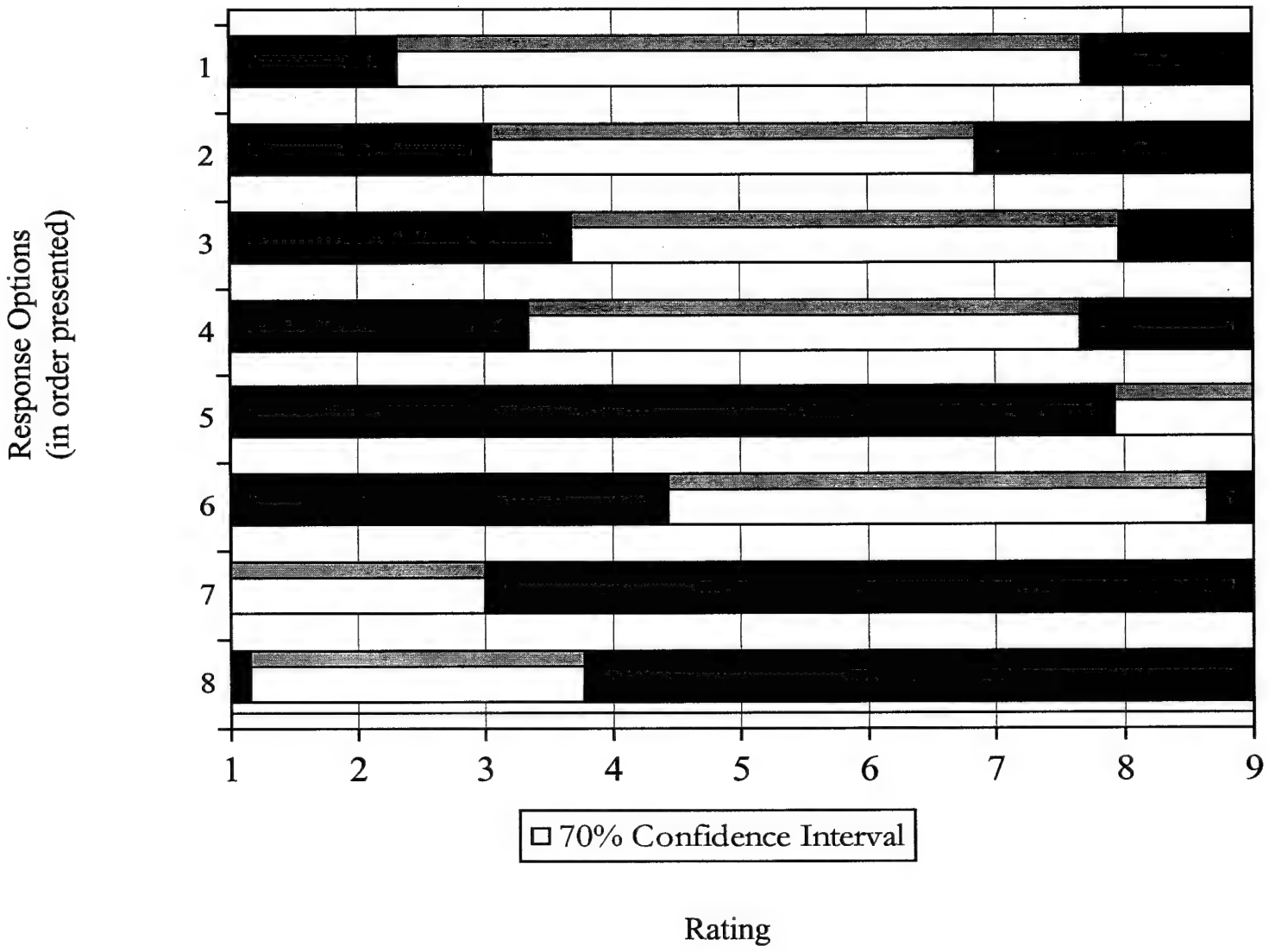
Response	Answer	Score
1	_____	_____
2	_____	_____
3	_____	_____
4	_____	_____
5	_____	_____
6	_____	_____
7	_____	_____
8	_____	_____
9	_____	_____
Total		_____

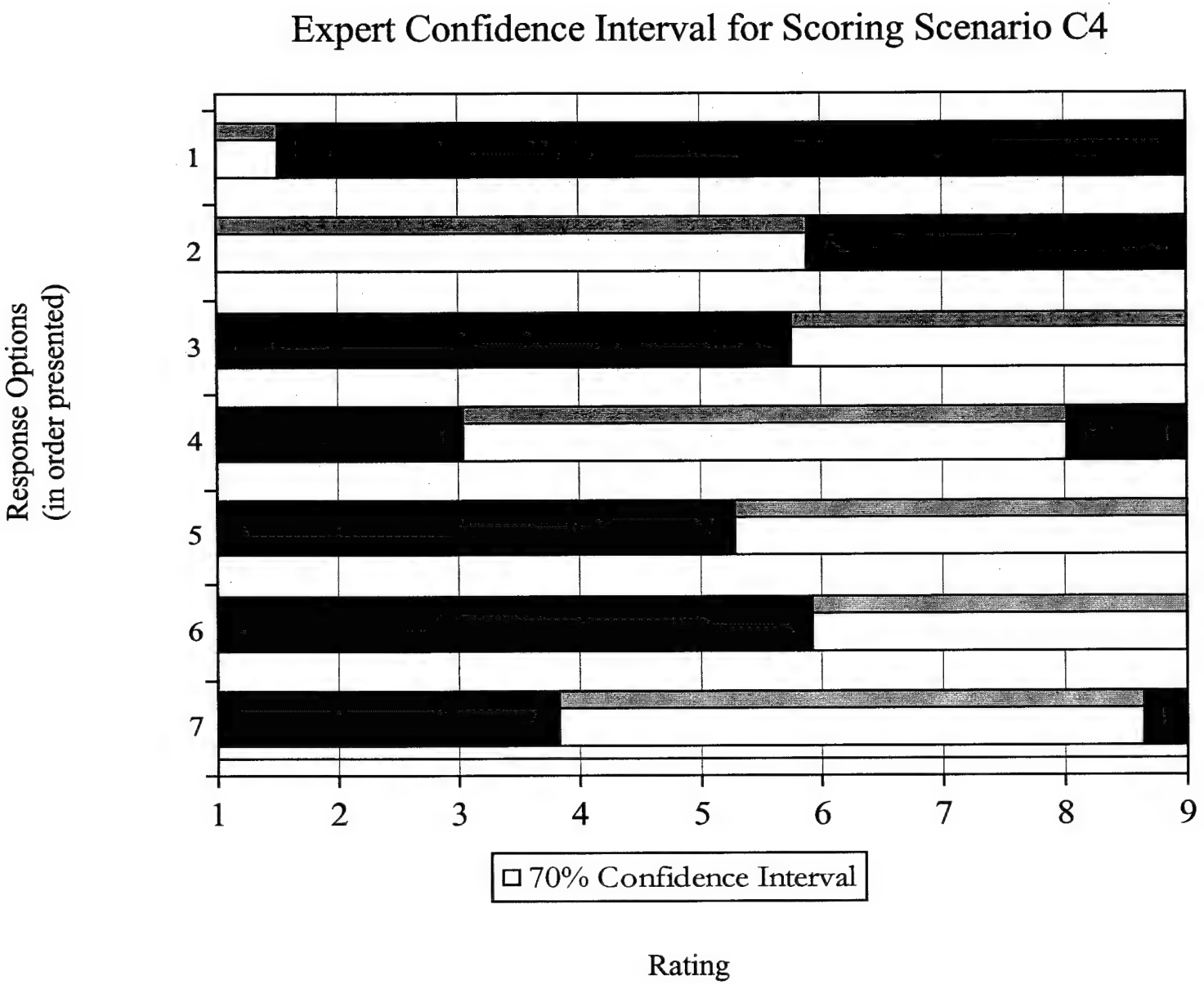
APPENDIX D

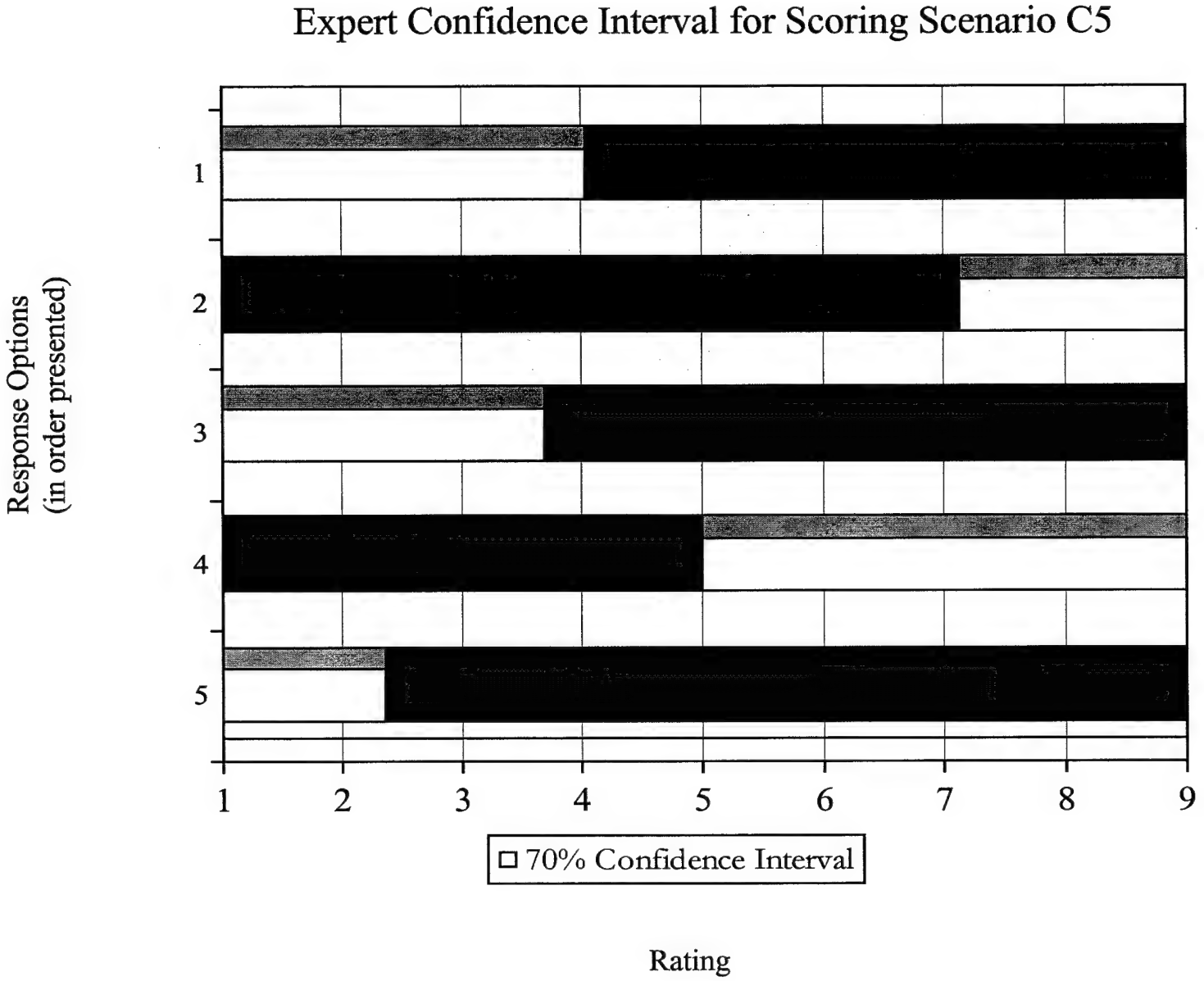
SCORING CHARTS FOR COMPANY COMMANDER QUESTIONNAIRE


Expert Confidence Interval for Scoring Scenario C1
Response Options
(in order presented)
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
1
2
3
4
5
6
7
8
9
70% Confidence Interval
Rating


Expert Confidence Interval for Scoring Scenario C2
Response Options
(in order presented)
1
2
3
4
5
6
7
8
9
10
11
12
1
2
3
4
5
6
7
8
9
70% Confidence Interval
Rating


Expert Confidence Interval for Scoring Scenario C3
Response Options
(in order presented)
1
2
3
4
5
6
7
8
1
2
3
4
5
6
7
8
9
70% Confidence Interval
Rating


Expert Confidence Interval for Scoring Scenario C4
Response Options
(in order presented)
1
2
3
4
5
6
7
1
2
3
4
5
6
7
8
9
70% Confidence Interval
Rating


Expert Confidence Interval for Scoring Scenario C5
Response Options
(in order presented)
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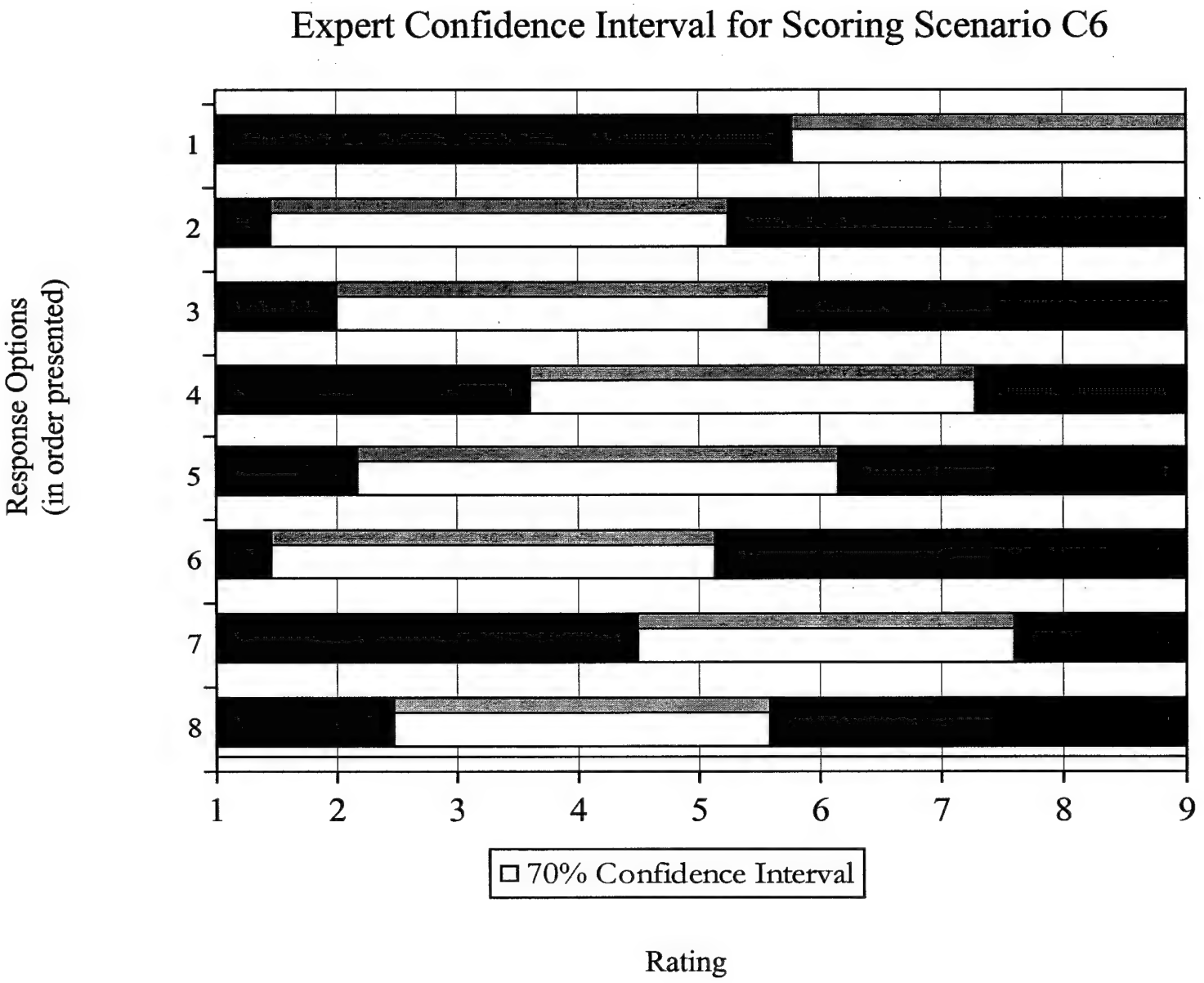
2
3
4
5
1
2
3
4
5
6
7
8
9
70% Confidence Interval
Rating


Expert Confidence Interval for Scoring Scenario C6
Response Options
(in order presented)
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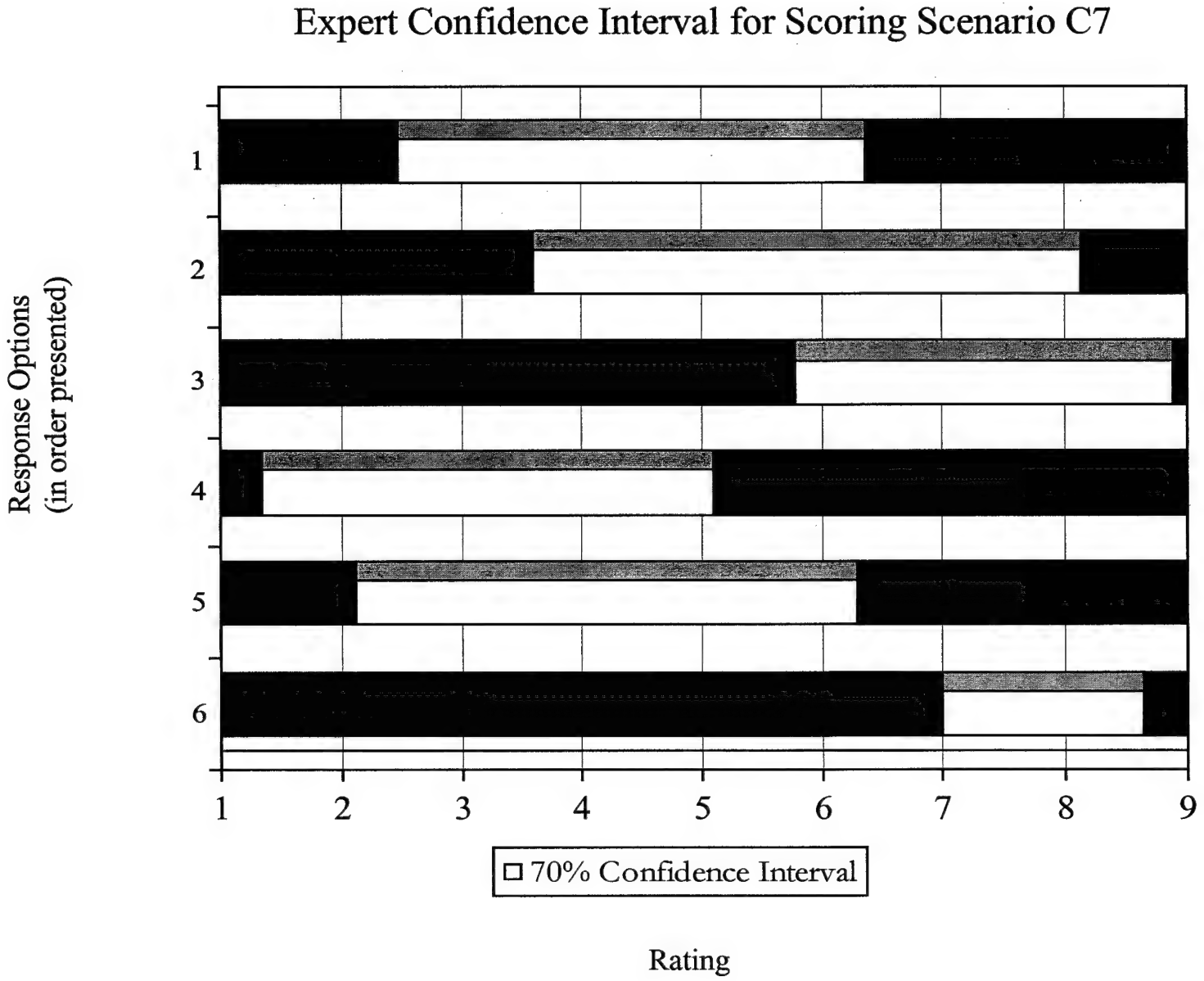
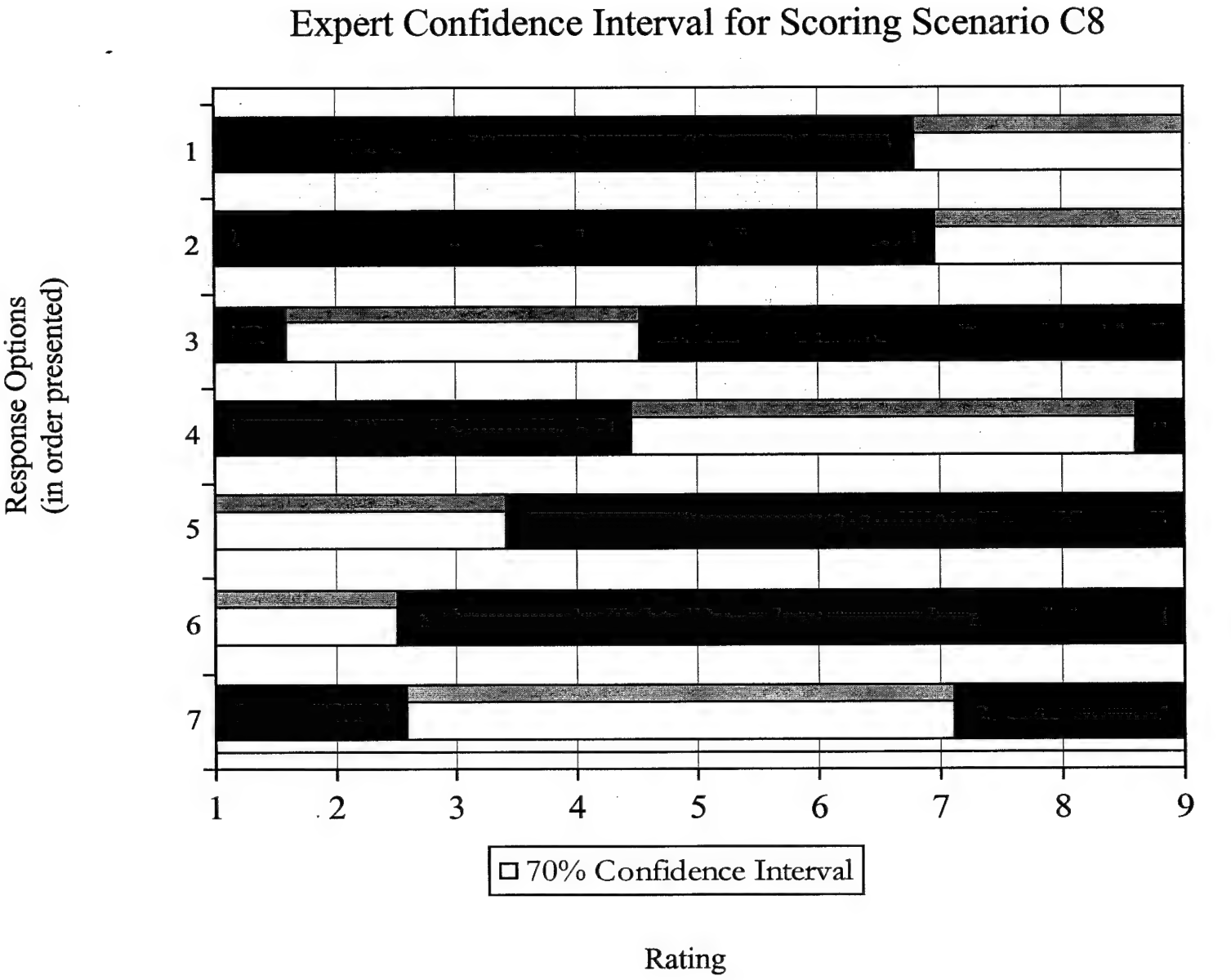
2
3
4
5
6
7
8
1
2
3
4
5
6
7
8
9
70% Confidence Interval
Rating


Expert Confidence Interval for Scoring Scenario C7
Response Options
(in order presented)
1
2
3
4
5
6
1
2
3
4
5
6
7
8
9
70% Confidence Interval
Rating


Expert Confidence Interval for Scoring Scenario C8
Response Options
(in order presented)
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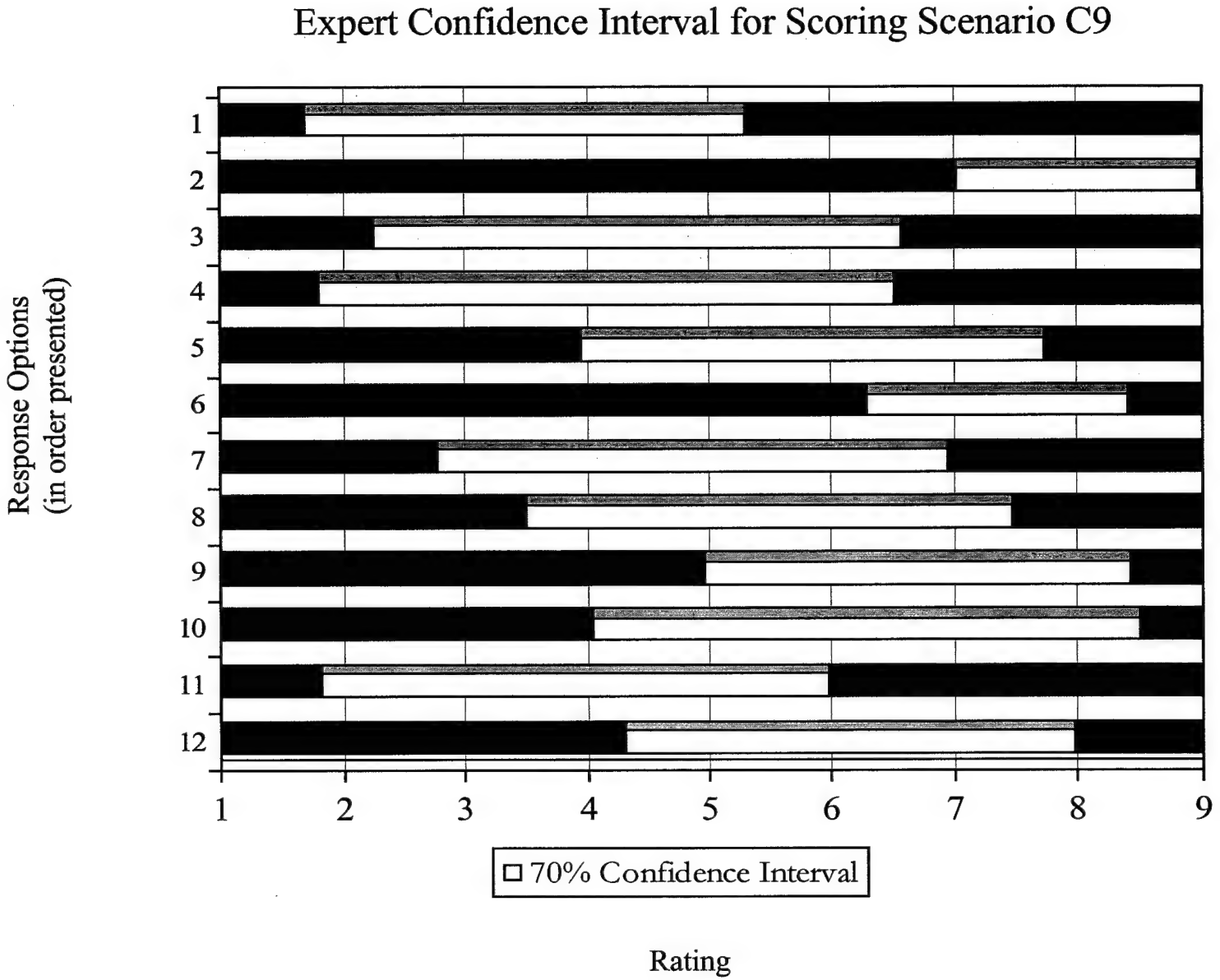
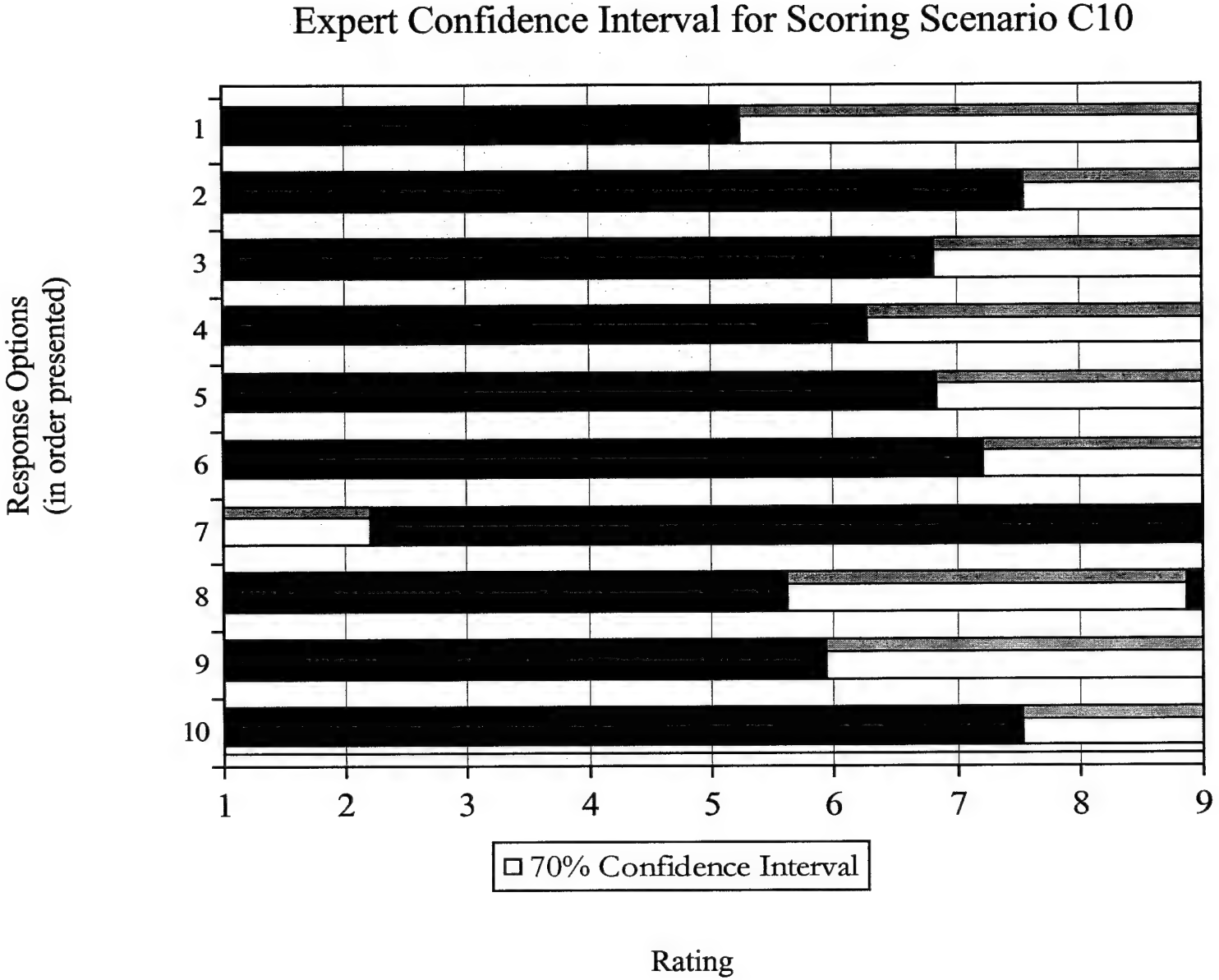
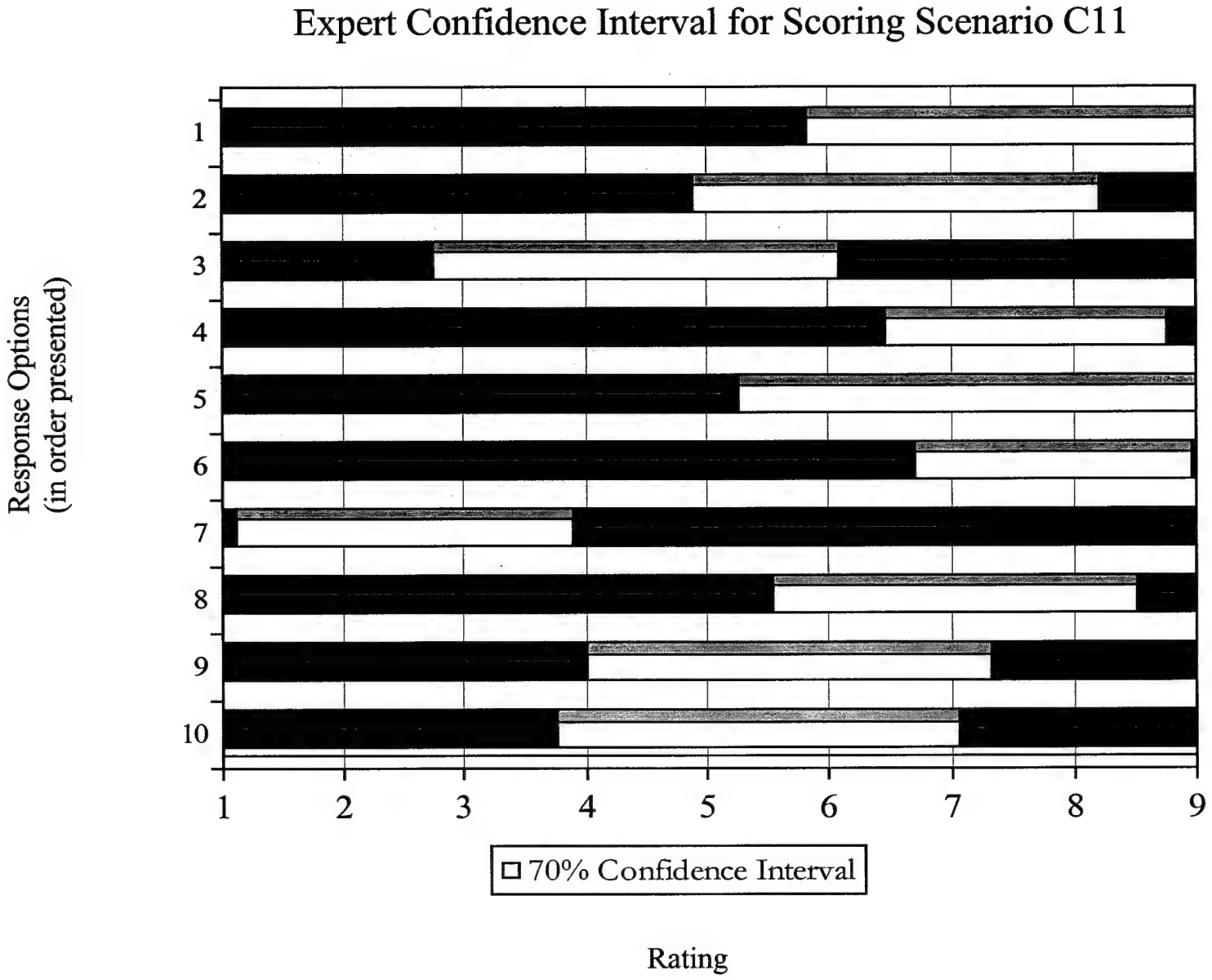
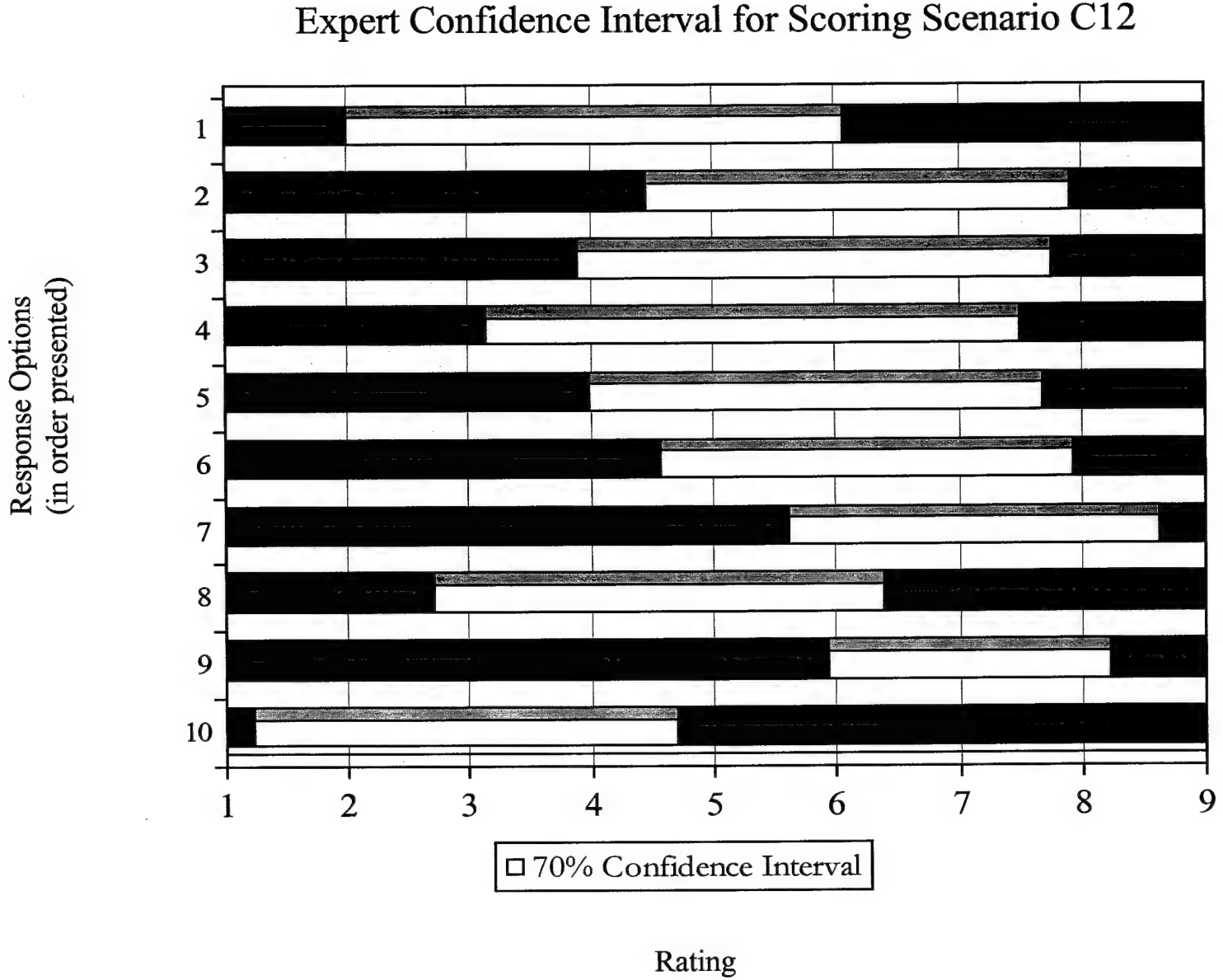
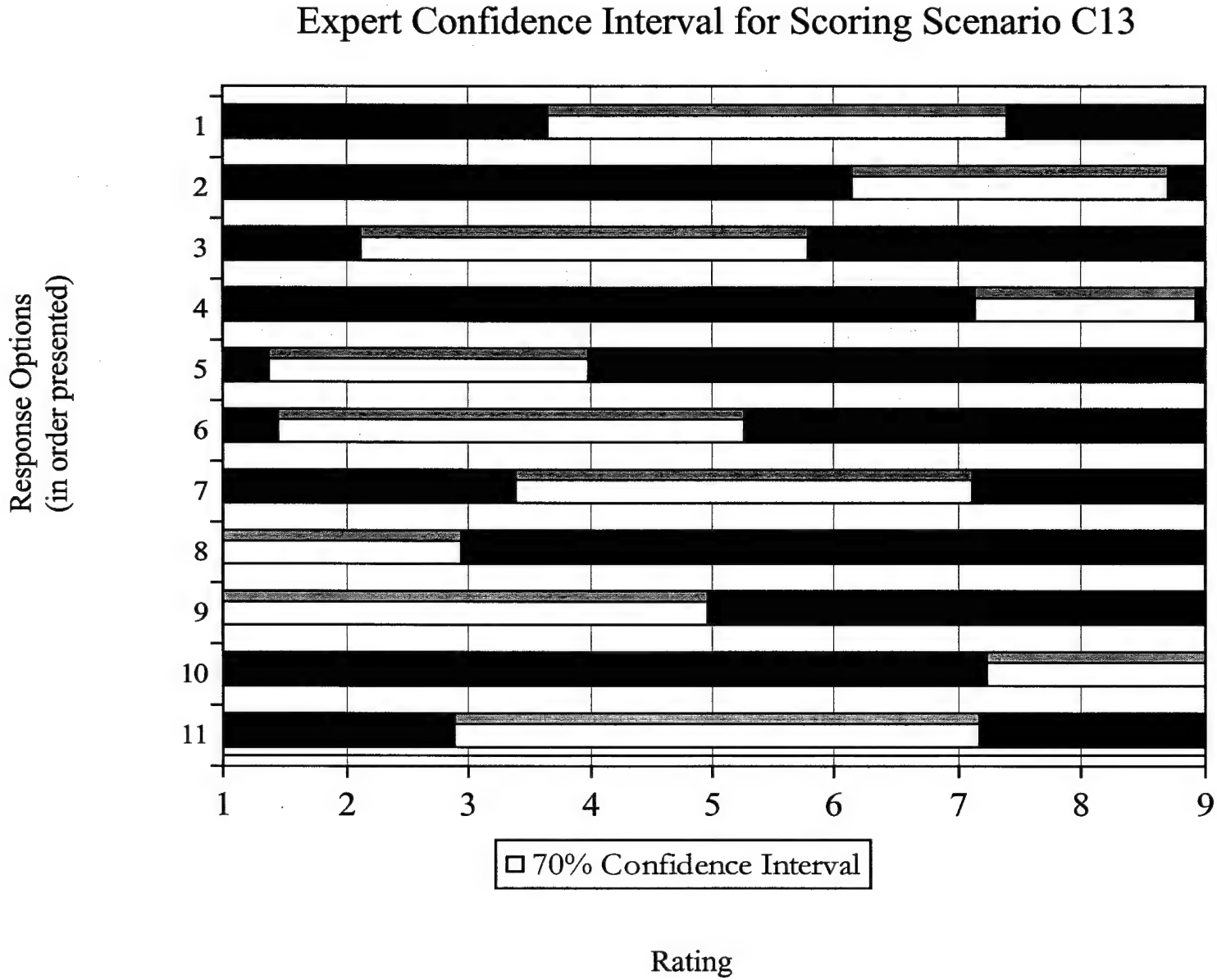
2
3
4
5
6
7
1
2
3
4
5
6
7
8
9
70% Confidence Interval
Rating

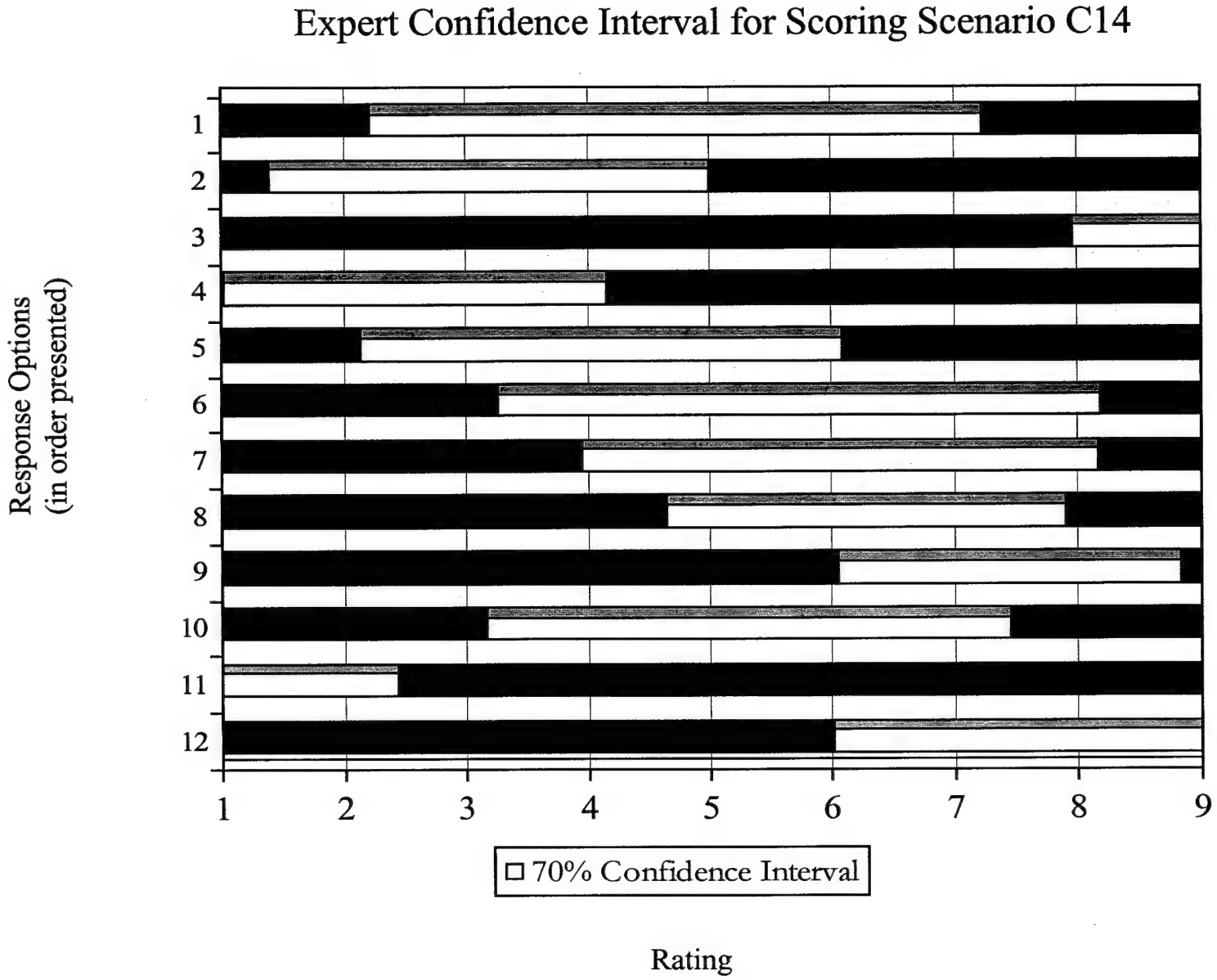

Expert Confidence Interval for Scoring Scenario C9
Response Options
(in order presented)
1
2
3
4
5
6
7
8
9
10
11
12
1
2
3
4
5
6
7
8
9
70% Confidence Interval
Rating

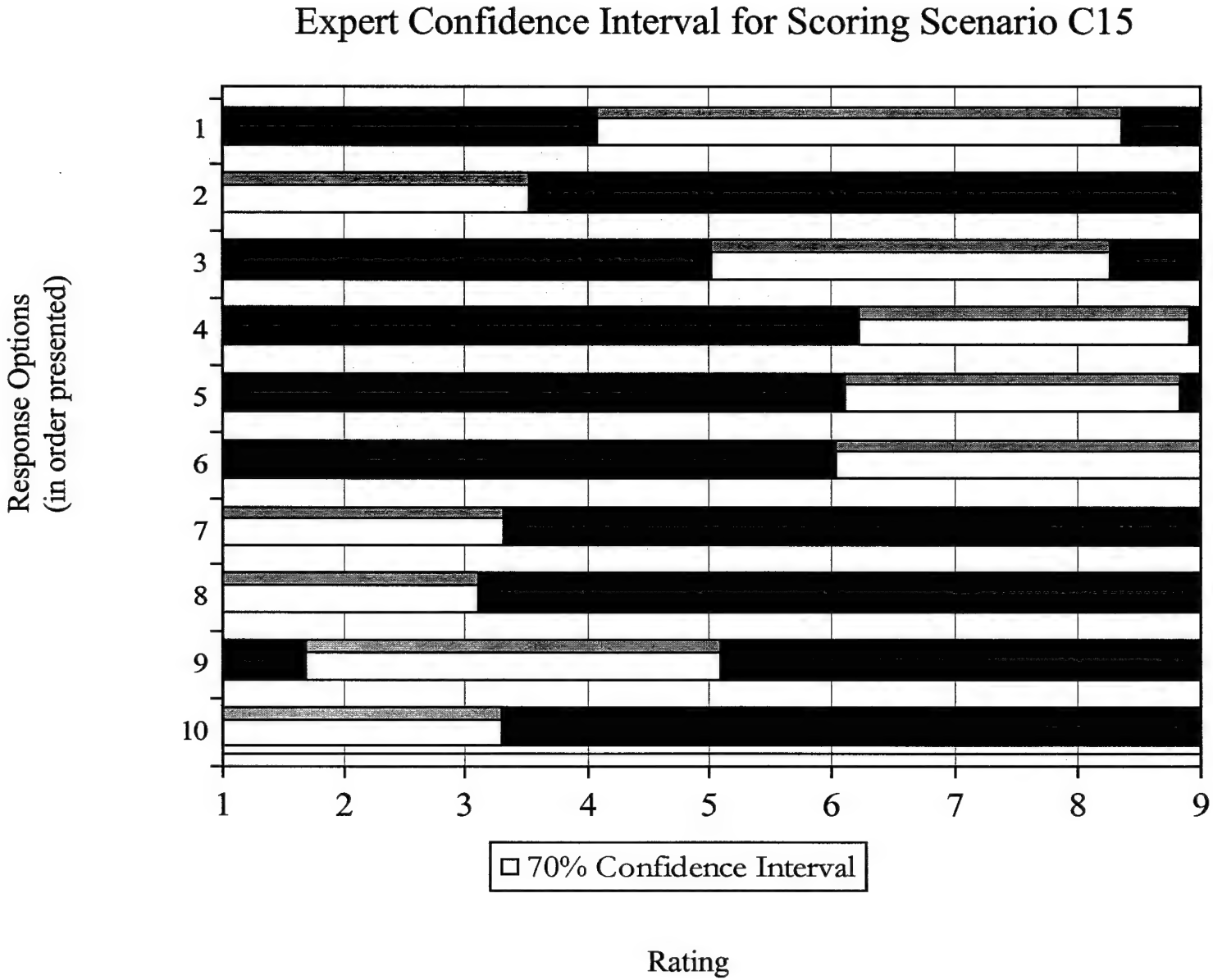

Expert Confidence Interval for Scoring Scenario C10
Response Options
(in order presented)
1
2
3
4
5
6
7
8
9
10
1
2
3
4
5
6
7
8
9
70% Confidence Interval
Rating

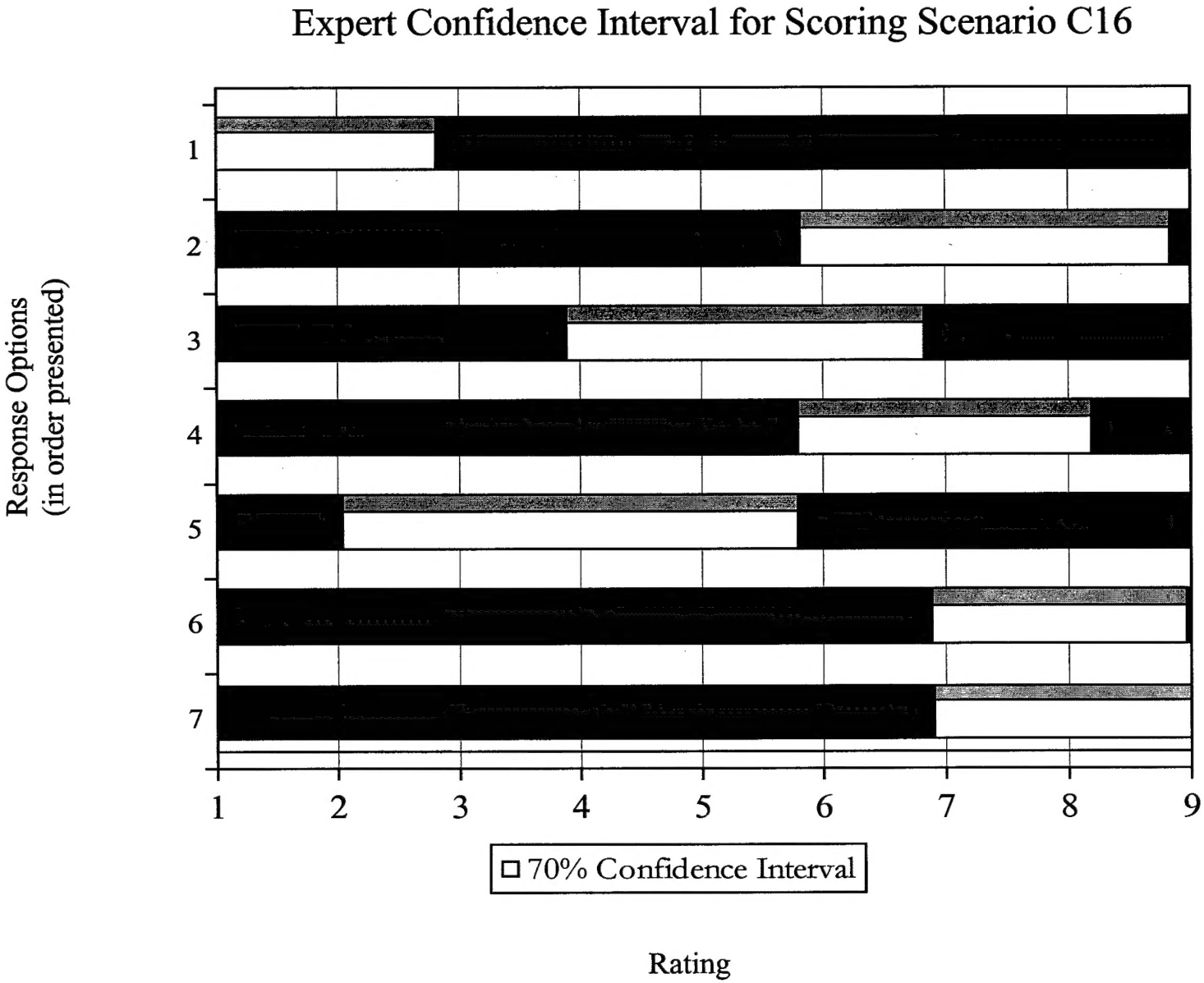

Expert Confidence Interval for Scoring Scenario C11
Response Options
(in order presented)
1
2
3
4
5
6
7
8
9
10
1
2
3
4
5
6
7
8
9
70% Confidence Interval
Rating

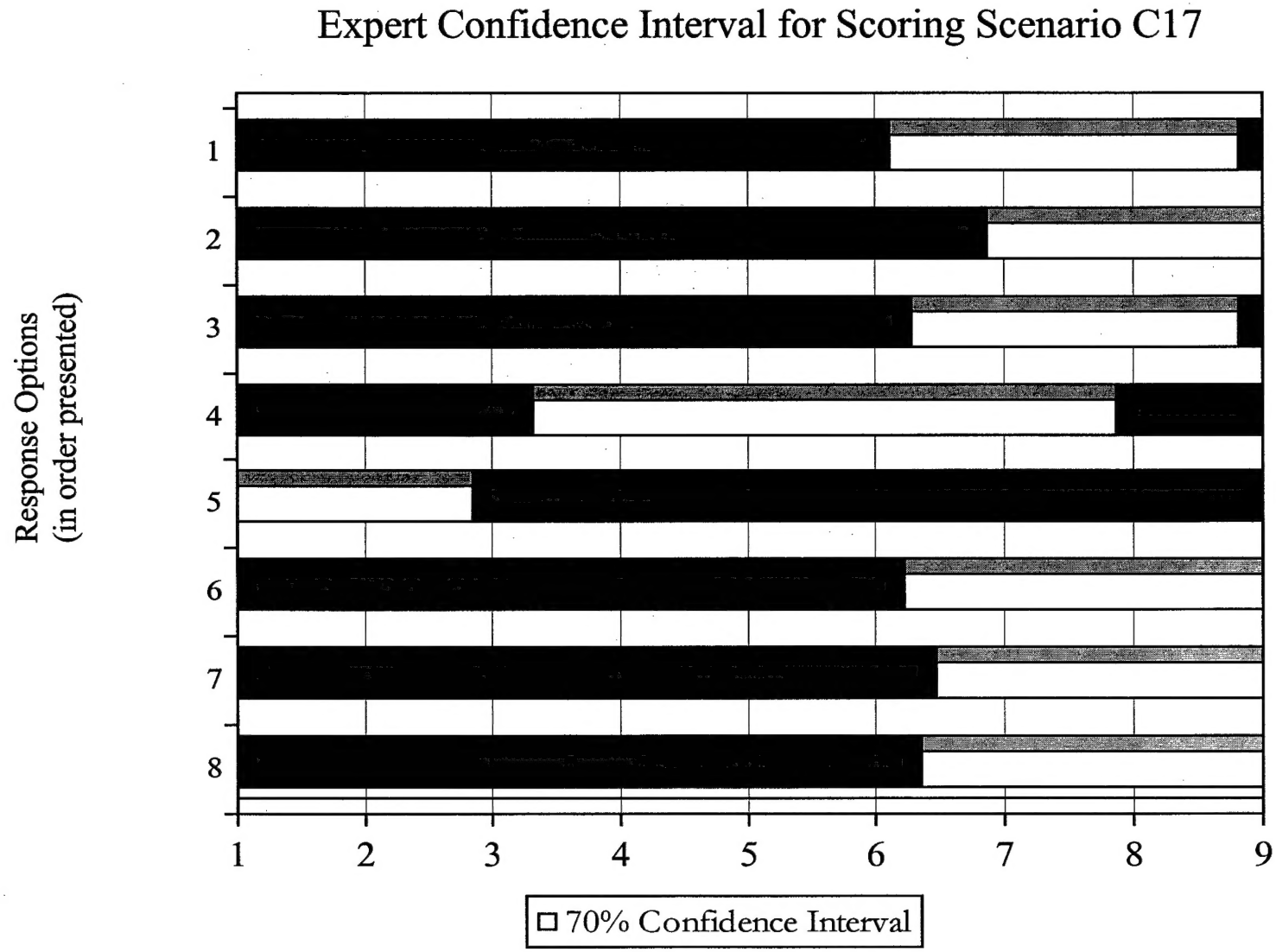

Expert Confidence Interval for Scoring Scenario C12
Response Options
(in order presented)
1
2
3
4
5
6
7
8
9
10
1
2
3
4
5
6
7
8
9
70% Confidence Interval
Rating

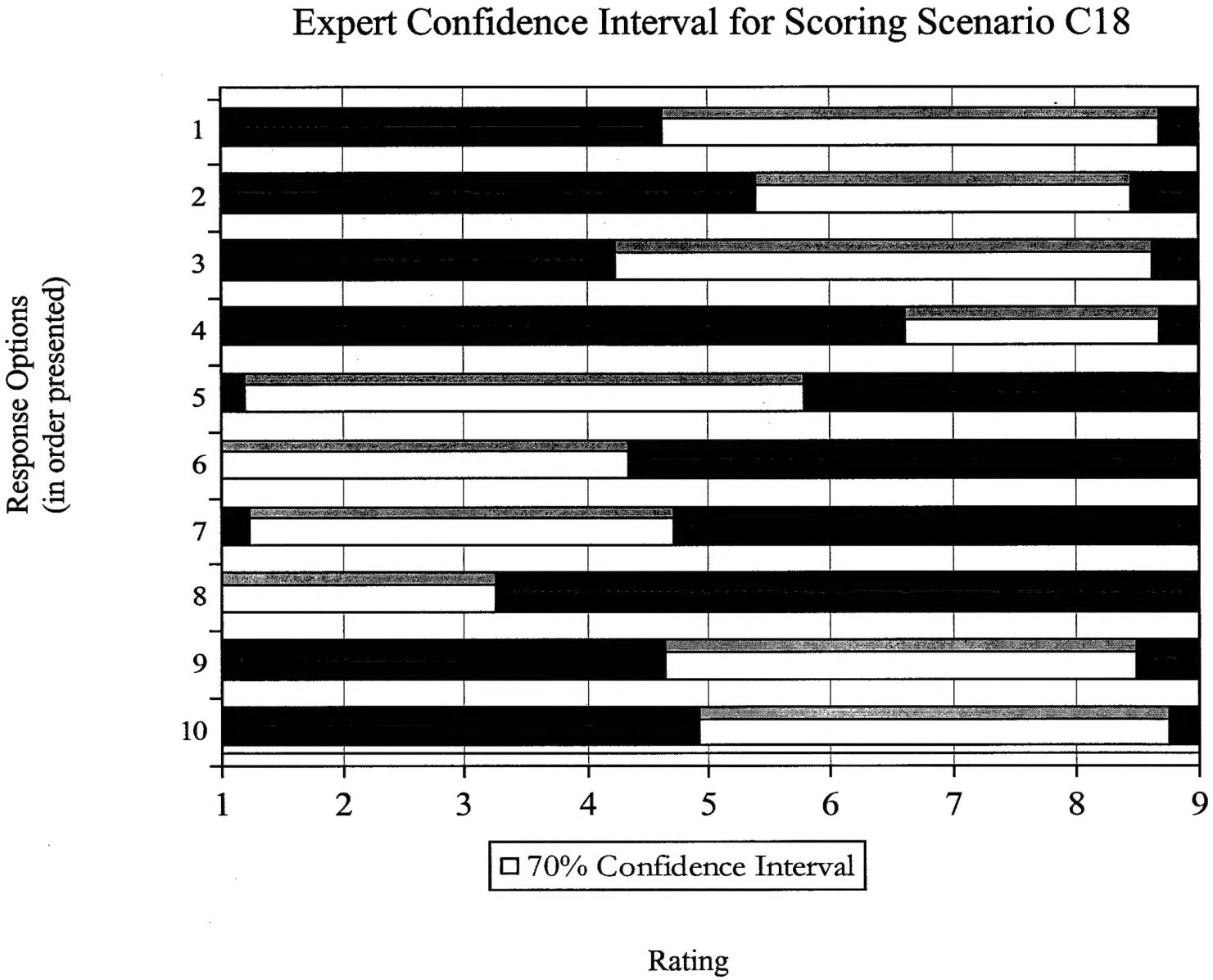

Expert Confidence Interval for Scoring Scenario C13
Response Options
(in order presented)
1
2
3
4
5
6
7
8
9
10
11
1
2
3
4
5
6
7
8
9
70% Confidence Interval
Rating

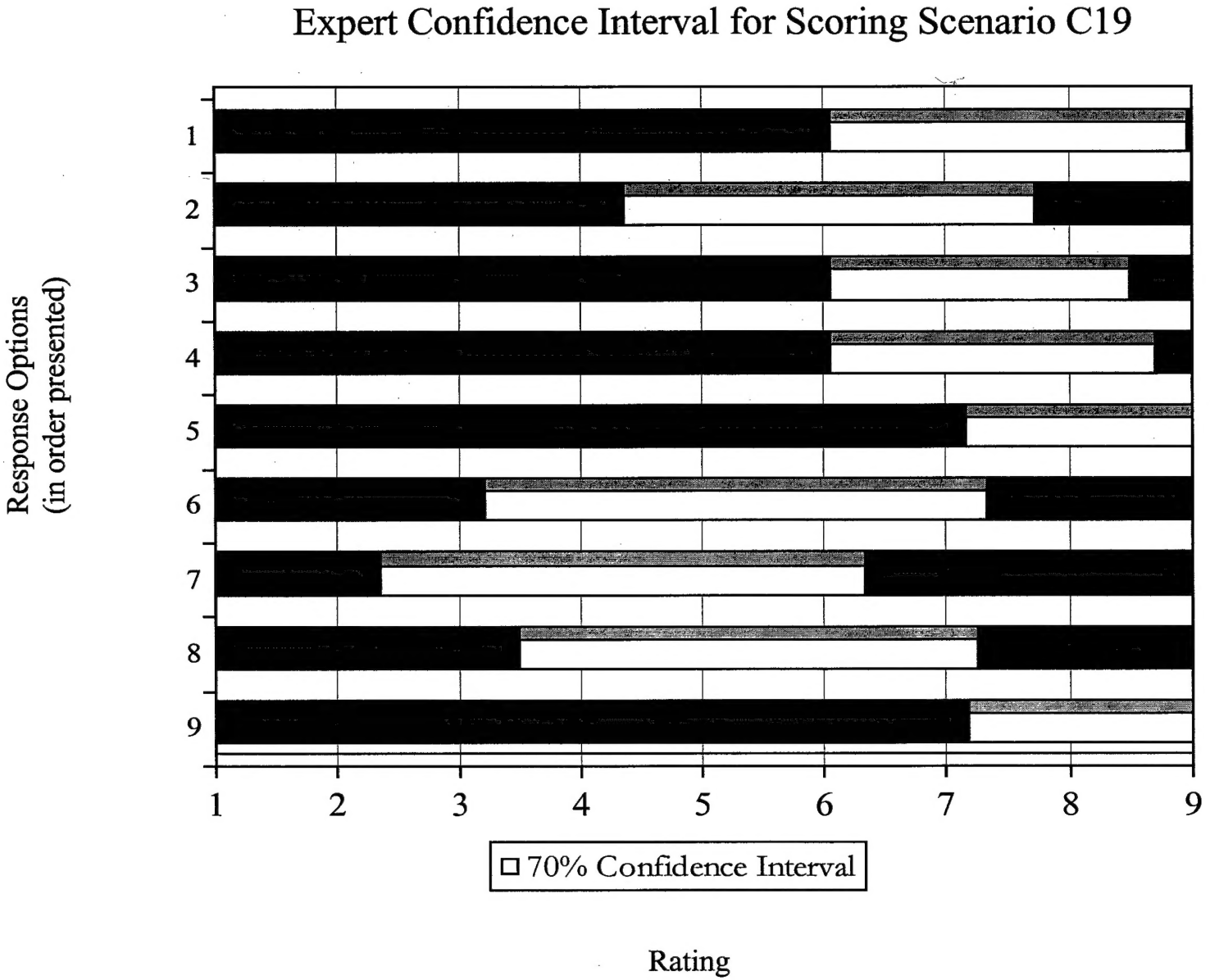

Expert Confidence Interval for Scoring Scenario C14
Response Options
(in order presented)
1
2
3
4
5
6
7
8
9
10
11
12
1
2
3
4
5
6
7
8
9
70% Confidence Interval
Rating


Expert Confidence Interval for Scoring Scenario C15
Response Options
(in order presented)
1
2
3
4
5
6
7
8
9
10
1
2
3
4
5
6
7
8
9
70% Confidence Interval
Rating


Expert Confidence Interval for Scoring Scenario C16
Response Options
(in order presented)
1
2
3
4
5
6
7
1
2
3
4
5
6
7
8
9
70% Confidence Interval
Rating


Expert Confidence Interval for Scoring Scenario C17
Response Options
(in order presented)
1
2
3
4
5
6
7
8
1
2
3
4
5
6
7
8
9
70% Confidence Interval
Rating


Expert Confidence Interval for Scoring Scenario C18
Response Options
(in order presented)
1
2
3
4
5
6
7
8
9
10
1
2
3
4
5
6
7
8
9
70% Confidence Interval
Rating


Expert Confidence Interval for Scoring Scenario C19
Response Options
(in order presented)
1
2
3
4
5
6
7
8
9
1
2
3
4
5
6
7
8
9
70% Confidence Interval
Rating